JVC

V00676

INSTRUCTIONS

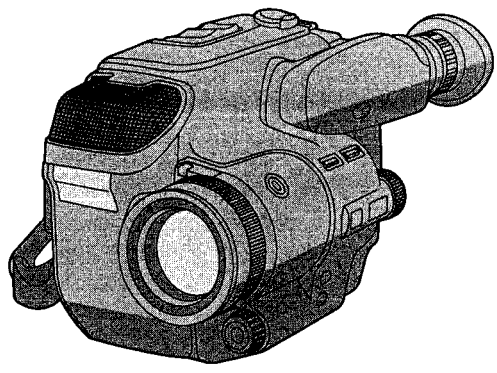
GR-SZ1

CAMERA-RECORDER/PLAYER

MANUEL D'INSTRUCTIONS: CAMERA-ENREGISTREUR/LECTEUR
BEDIENUNGSANLEITUNG: CAMCORDER
MANUAL DE INSTRUCCIONES: CAMARA DE VIDEO
GEBRUIKSAANWIJZING: CAMERA/RECORDER
BRUKSANVISNING: KAMERA/BANDSPELARE
MANUALE DI ISTRUZIONI: TELECAMERA/REGISTRATORE
INSTRUKTIONSBOG: VIDEOKAMERA
KÄYTTÖOHJEET: KAMERANAUHURI

Specifically for the GR-SZ1EG/AA-V11EG
Spécial pour le GR-SZ1EG/AA-V11EG
Für Modellausführung GR-SZ1EG/AA-V11EG
Especialmente para la GR-SZ1EG/AA-V11EG
Speciaal voor de GR-SZ1EG/AA-V11EG
Speciellt avsedd för GR-SZ1EG/AA-V11EG
Specifico per il GR-SZ1EG/AA-V11EG
Specielt for GR-SZ1EG/AA-V11EG
Erityisesti malleille GR-SZ1EG/AA-V11EG

Super VHS
videomovie
S-VHS-C VHS PAL 625
Hi-Fi STEREO



YU30052-334

SAFETY PRECAUTIONS

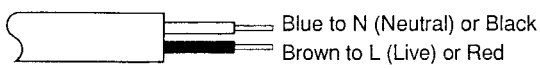
WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

The AA-V11EG AC Power Adapter/Battery Charger should be used with 110 — 240 V~, 50/60 Hz only.
Caution:
To prevent electric shocks and fire hazards, do NOT use any other power source.

IMPORTANT (In the United Kingdom)
Mains Supply (240 V~, 50 Hz only)

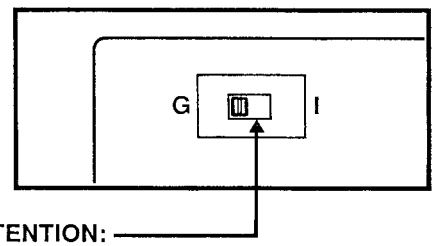
IMPORTANT

Do not make any connection to the Larger Terminal coded E or Green. The wires in the mains lead are coloured in accordance with following code:



If these colours do not correspond with the terminal identifications of your plug, connect as follows:
Blue wire to terminal coded N (Neutral) or coloured black.
Brown wire to terminal coded L (Live) or coloured Red.
If in doubt — consult a competent electrician.
Note
We recommend that you should disconnect the AC cord from the outlet.

Warning on lithium battery
The battery used in this device may present a fire or chemical burn hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate.
Replace battery with Panasonic (Matsushita Electric) CR2025; use of another battery may present a risk of fire or explosion.
- Dispose of used battery promptly.
- Keep away from children.
- Do not disassemble and do not dispose of in fire.



ATTENTION:
The system select switch on the side of the optional RF-V4E RF unit has been set to G (Continental PAL, 5.5 MHz).

CAUTION:
To prevent shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified personnel.

NOTES:
- The rating plate (serial number plate) and safety caution are on the bottom and/or the back of the main unit.
- The rating plate (serial number plate) of the AC power adapter/battery charger is on its bottom.

This unit is produced to comply with Directives 76/889/EEC, 82/499/EEC, 87/308/EEC and Standard IEC Publ. 65.

You are recommended to carefully read the cautions on pages 36 and 37 before use.

S-VHS C 625 VHS C PAL

Cassettes marked " S-VHS C " and " VHS C " can be used with this VideoMovie. However, S-VHS recordings are possible only with cassettes marked " S-VHS C ".

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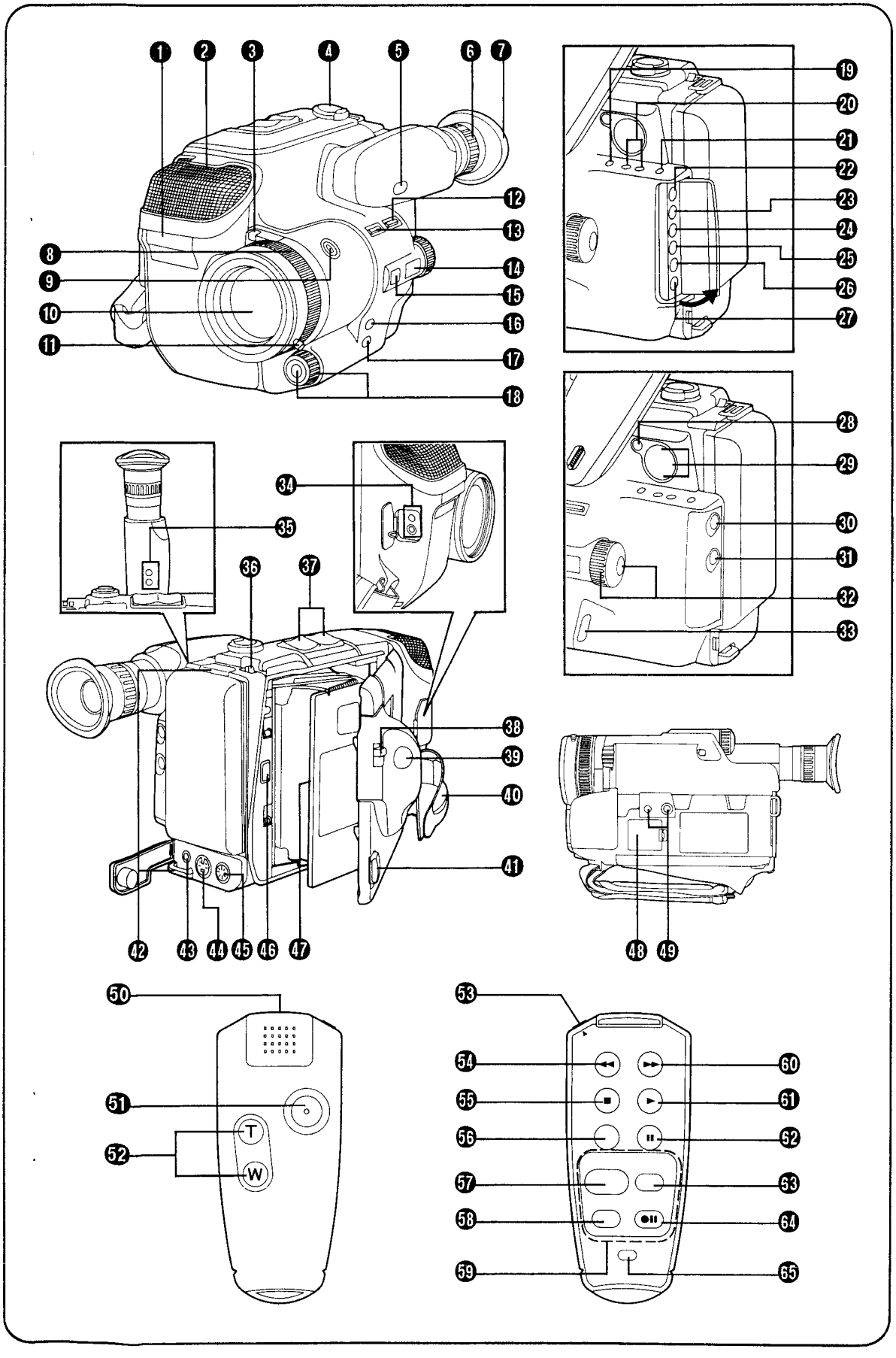
Printed in Japan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Thank you for purchasing the JVC VideoMovie. Before use, read this instruction booklet carefully for obtaining the best results from your new unit.
Diagrams are on the reverse side of this page. Fold it out and keep it opened so that you can refer to the diagrams when you are reading this booklet.

ENGLISH INSTRUCTIONS ..... Page 2 – 39

Nous vous remercions pour l'achat du VideoMovie JVC. Avant de l'utiliser, lire avec soin ce manuel d'instructions pour obtenir les meilleurs résultats possibles de votre nouvel appareil.
La planche de référence est au verso de cette page. Rabattre la feuille et la garder ouverte afin de pouvoir se reporter aux schémas pendant la lecture de ce manuel.

INSTRUCTIONS EN FRANÇAIS ..... Page 40 – 77

Vielen Dank für den Kauf dieses Camcorders von JVC. Bitte lesen Sie diese Bedienungsanleitung sorgfältig durch, um die Leistungsfähigkeit dieses Geräts stets optimal nutzen zu können.
Auf der Rückseite dieser Seite finden Sie Bezugsabbildungen zu den Beschreibungen dieser Anleitung. Wir empfehlen, diese Seite bei Gebrauch der Anleitung nach außen zu klappen.

DEUTSCHE BEDIENUNGSANLEITUNG ..... Seite 78 – 115

Le agradecemos la confianza que nos ha demostrado al adquirir la VideoMovie de JVC. Antes de utilizarla, lea detenidamente este manual de instrucciones para obtener los mejores resultados de su nueva unidad.
Los diagramas se encuentran al reverso de esta página. Desdóblela y manténgala abierta de tal modo que pueda referirse a los diagramas mientras lee este manual.

INSTRUCCIONES EN ESPAÑOL ..... Página 116 – 153

Dank u hartelijk voor de aanschaf van de JVC VideoMovie. Lees deze gebruiksaanwijzing aandachtig door ter verkrijging van de beste resultaten alvorens dit toestel in gebruik te nemen.
Er bevinden zich enkele afbeeldingen aan de achterkant van dit blad. Vouw dit blad uit en houd het bij de hand om naar te verwijzen tijdens het lezen van deze handleiding.

NEDERLANDSE GEBRUIKSAANWIJZING ..... Bladzijde 154 – 191

Läs denna bruksanvisning noga innan VideoMovie JVC används, eftersom bästa resultat vid användningen då uppnås.
Figur med apparatens funktioner finns på omstående sida. Vik ut denna sida och ha den utvikt samtidigt som bruksanvisningen läses.

ANVISNINGAR PÅ SVENSKA ..... Sid. 192 – 229

Vi ringraziamo per aver acquistato il videoregistratore JVC. Per ottenerne i migliori risultati, vi preghiamo di leggere attentamente questo manuale di istruzioni prima di passare ad utilizzare il videoregistratore.
I diagrammi ed i relativi riferimenti sono al verso di questa pagina. Si consiglia di tenerla aperta per poter seguire più facilmente i riferimenti e le istruzioni del manuale.

ISTRUZIONI IN ITALIANO ..... Pagine 230 – 267

Til lykke med Deres nye JVC GR-SZ1EG videokamera. For at opnå den fulde udnyttelse af videokameraet bør De læse denne instruktionsbog omhyggeligt igennem.
De bliver hurtigere fortrolig med videokameraet, når De følger med i diagrammerne på den foregående side.

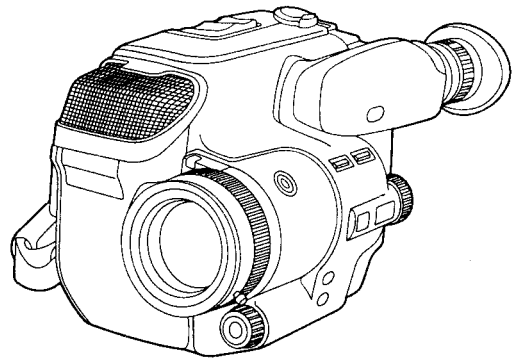
DANSK VEJLEDNING ..... Side 268 – 305

Kiitämme tämän JVC videokameran hankinnasta. Ennen kuin ryhdyt käyttämään laitetta, lue tämä ohjekirjanen huolellisesti, jotta opit tuntemaan laitteesi kaikki toiminnot.
Kaavakuvat sijaitsevat tämän sivun kääntöpuolella. Avaa tämä sivu ja pidä se auki, jotta voit katsoa kuvia samalla kun luet ohjeita.

SUOMENKIELISET OHJEET ..... Sivu 306 – 343

MAJOR FEATURES

- **Multi function (MF) lens**
- **Microscope mode**
- **Digital image stabilizer**
- **Color viewfinder**
- **Snap shot function**
- **Cinema mode**
- **Scene selector dial**
- **Random Assemble Editing**
- **Auto head cleaner**



ENGLISH

This VideoMovie is designed to be used with PAL-type colour television signals. It cannot be used for playback with a television of a different standard. However, live recording and viewfinder playback are possible anywhere. Use the BN-V12U/BN-V22U/BN-V50U/BN-V60U battery packs and, to recharge them, the provided multi-voltage AC power adapter/battery charger. (An appropriate conversion adapter may be necessary to accommodate different designs of AC outlets in different countries.)

CONTENTS

Safety precautions 2
Major features 3
Controls and connectors 4
Viewfinder indications 5
Warnings 5
Preparations 6
Menu system 10
Recording operation 12
Advanced videography techniques 15
Playback 22
Using the cassette adapter (optional) 24
Connections for playback 24
Editing techniques 27
Using accessories 31
Using the optional remote control unit 32
Systems flexibility 34
Supplemental information 35
Cautions 36
Video cassettes 37
In case of difficulty 38
Specifications 39

CONTROLS AND CONNECTORS

Refer to the diagrams on the front foldout page.

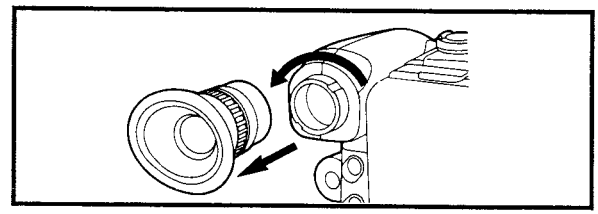
No. Page

❶ Infrared beam sensor window 28, 31
❷ Microphone
❸ Tally lamp
Lights to show that recording is in progress.
❹ Power switch with LED indicator
"PLAY" position:
To use for VCR functions.
"CAMERA AUTO LOCK" position:
Setting to this position locks the VideoMovie in the Full Auto mode, eliminating the possibility of misoperation by accidentally touching the manual operation buttons while shooting. It is convenient when asking someone else to do the shooting.
"CAMERA AUTO RELEASE" position:
Manual operation and access to the many creative shooting functions of this VideoMovie is possible.
❺ Viewfinder brightness dial 8
❻ Diopter adjustment ring 8
❼ Eyepiece
❽ Manual power focus ring 15
❾ Auto/manual FOCUS button 15
❿ Front lens 16
⓫ Lens release button 17
⓬ D.I. STABILIZER button 20
⓭ DIGITAL ZOOM button 16
⓮ Display window 18
⓯ CINEMA mode button 19
⓰ DISPLAY button 9, 14
⓱ FADER button 19
⓲ IRIS +/– dial and ON/OFF button 20
⓳ Date/time adjust SELECT button 9
⓴ Date/time adjust SET –/+ buttons 9
㉑ Display MODE button 14
㉒ FF button 13, 22
㉓ PLAY button 22
㉔ REW button 13, 22
㉕ STOP button 22
㉖ PAUSE button 13, 23
㉗ R.A.EDIT START button 29
㉘ MENU ON/OFF button 10
㉙ Menu controller (SELECT/SET) 10
㉚ RETAKE F button 13
㉛ RETAKE R/Q.REVIEW button 13
㉜ SCENE SELECTOR dial and ON/OFF button 18
㉝ SNAP SHOT button 20
㉞ External MIC jack
㉟ COLOR/CONTRAST Volume (for JVC service personnel)
㊱ BATTERY RELEASE switch 6
㊲ Power zoom buttons (T/W) 16
㊳ REC LOCK switch
Convenient power ON/OFF while shooting.
㊴ Recording Start/Stop button 12
㊵ Grip strap 8
㊶ Cassette door LOCK/OPEN switch 8
㊷ Eyelets for shoulder strap 31
㊸ REMOTE jack 32
㊹ S-OUT connector
For connection to a television or VCR equipped with an S-VIDEO input terminal.
㊺ AV OUT connector
Both audio and video signals can be obtained from this connector for editing, etc.
㊻ EJECT button 8
㊼ Cassette holder 8
㊽ Clock battery compartment 9
㊾ Tripod mounting socket 31

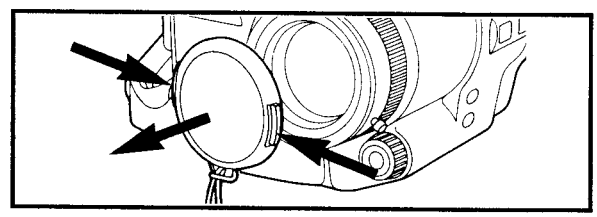
Remote conrol unit

㊿ Infrared beam transmitting window
(51) START/STOP button
(52) ZOOM (T/W) button
(53) PAUSE IN connector
(54) REW/Retake (Rewind) button
(55) STOP button
(56) VCR CTL button
(57) IN/OUT button
(58) CANCEL button
(59) Random Assemble Editing buttons
(60) FF/Retake (Forward) button
(61) PLAY button
(62) PAUSE button
(63) ON/OFF button
(64) VCR REC STBY button
(65) MBR PRESET button

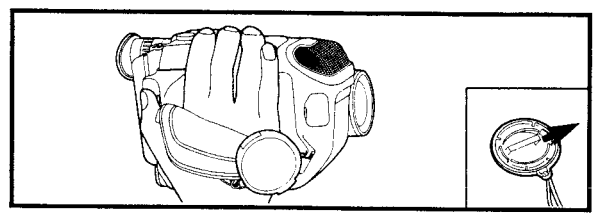
*In cases where buttons located on the remote control and the VideoMovie have the same name, their functions will also be the same.



Cleaning the eyepiece
The viewfinder eyepiece can be removed for cleaning. Turn the eyepiece counterclockwise and pull it out.

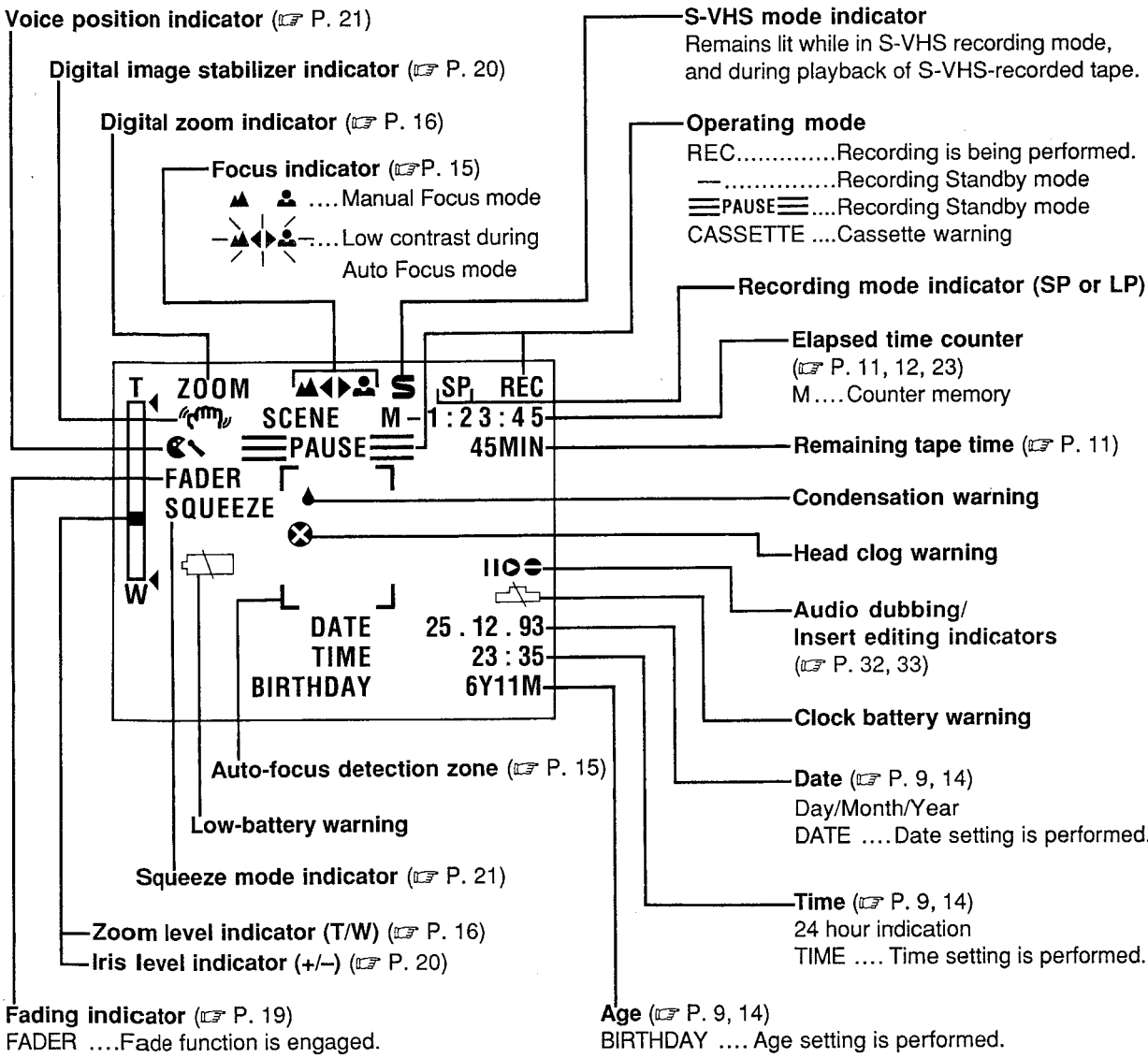


Remove/reattach the lens cap
Remove or reattach the lens cap by pressing the tabs on either side of the lens cap.



Attaching the lens cap to the hand grip, prevents it swinging while shooting.

VIEWFINDER INDICATIONS



WARNINGS

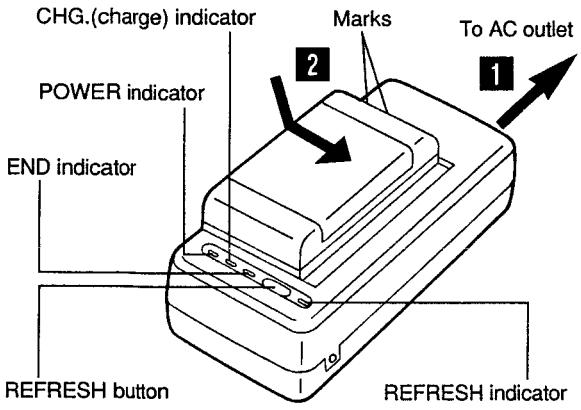
LOW-BATTERY WARNING ( )
When the battery power is coming to an end, a battery warning indication blinks in the viewfinder. After indication appears, the power turns off automatically. Replace the battery pack with a fully charged one.

CLOCK BATTERY WARNING ( )
Blinks when the lithium battery is not in place or exhausted. In this condition, no date/time function is available.

CONDENSATION WARNING ( )
Appears when the excessive moisture condensation occurs inside the unit.

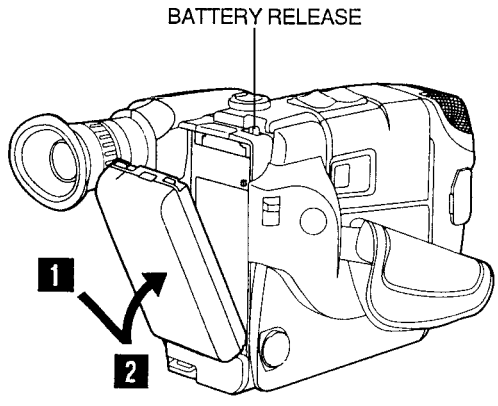
CASSETTE WARNING (CASSETTE)
Blinks to warn that no cassette or a cassette without safety tab is loaded.

PREPARATIONS



	Charging time	Discharging time
BN-V12U	approx. 70min.	approx. 210 min.
BN-V22U	approx. 130min.	approx. 420 min.
BN-V50U	approx. 170min.	approx. 510 min.
BN-V60U	approx. 130min.	approx. 420 min.

- The diagrams above indicate the approximate charging and discharging times of battery packs that are fully charged.
- Charging time and discharging time will vary depending on the ambient temperature and the status of the battery pack.



Recording time

BN-V12U	approx. 30 min.
BN-V22U	approx. 65 min.
BN-V50U	approx. 80 min.
BN-V60U	approx. 65 min.

- The recording time per charge is influenced by the duration of the recording standby, frequency of zooming, etc. It is safer to have spare battery packs.

POWER SUPPLY SYSTEM

The convenient 3-way power supply system gives you a choice of the most appropriate power supply unit, depending on the application.

- No function is available without power supply.
- Do not use any power supply other than specified.
- Never attempt to use these power supply units with any equipment other than the VideoMovie.
- The provided AC Adapter/Battery Charger features automatic voltage selection in the AC range from 110 V to 240 V.

WITH BATTERY PACK

The battery pack has been kept in the uncharged state for shipment. Therefore, before use, be sure to charge it.

Charging the battery pack

1. Connect the AC power cord to a wall outlet.
   — The power indicator lights.
2. Align marks and slide the battery pack in the direction of the arrow until it locks in place.
   — The CHG. indicator lights.
   — When charging has been completed, the END indicator will light.
3. Slide the battery pack in the opposite direction of the arrow.

Attaching the battery pack

1. Hook-on the battery pack's lower end to the bottom of the VideoMovie's battery receptacle.
2. Push the battery pack in until it locks in place.

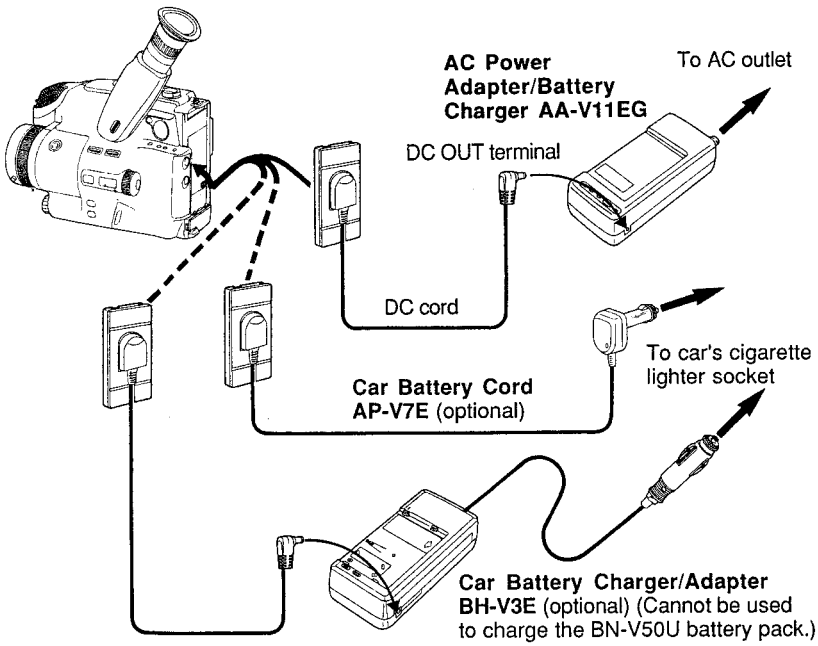
To remove the battery pack:

Pull out the battery pack while sliding BATTERY RELEASE.

Using the REFRESH feature

The REFRESH feature on the AC power adapter allows you to completely discharge the power from the battery pack before charging. After charging the battery pack several times, the actual battery operating time will gradually decrease. For this reason it is recommended to use the REFRESH feature only after every 5 charges.

1. Attach the battery pack to the adapter as illustrated above.
2. Push REFRESH.
   — The REFRESH indicator will light and discharging will begin.
   — After discharging is completed, the indicator will go off.


AC Power Adapter/Battery Charger AA-V11EG
To AC outlet
DC OUT terminal
DC cord
To car's cigarette lighter socket
Car Battery Cord AP-V7E (optional)
Car Battery Charger/Adapter BH-V3E (optional) (Cannot be used to charge the BN-V50U battery pack.)

WITH AC POWER

Use the AC Power Adapter/ Battery Charger.

Note:

This unit can be used with 110 V to 240 V power supplies. Selection is automatic and no adjustment is required.

IN A CAR

Use the optional BH-V3E Car Battery Charger or AP-V7E Car Battery Cord. Before use, refer to the instruction booklet.

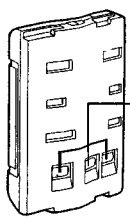
ENGLISH

Notes:

- Do not repeatedly recharge a battery pack without fully discharging it. Its service life will decrease. Use the REFRESH feature after every 5 charges.
- Even if a battery pack is fully charged, but is not used, it naturally discharges gradually. Be sure to recharge the battery pack just before using it, or the day before you intend to use it.
- This unit becomes warm due to the flow of electric current inside. Operate it in places having good ventilation. Do not allow it to discharge in a container, such as a bag, etc. Blocking the ventilation causes the temperature inside the unit to rise, possibly resulting in a damaged unit.
- If either recharging or discharging is stopped in the middle of the process, remove the battery pack before unplugging the AC cord.
- This unit incorporates an over-discharging protection circuit; however, immediately remove the battery pack from this unit after discharging has been completed to maintain the battery pack's capacity.
- If used near a radio, the AC power adapter may interfere with reception.
- Be sure to unplug the DC cord before charging or discharging the battery pack.
- Before storing the battery pack for a long period it is recommended to discharge it. To discharge the battery pack, unplug the AC adapter and attach the battery pack before activating the REFRESH function. When activated, the REFRESH indicator will light. When discharge is completed, the indicator will go off.
- The REFRESH feature will not function if the power status of a battery pack is discharged (No power remains).
- When the CHG.indicator is blinking, the battery pack has become hot. Wait for a while for the battery pack to cool. With a just-purchased battery pack, or with a battery pack that has been stored for a long period, the CHG.indicator may not light properly. In such a case, remove and reattach the battery pack again, then do the recharging procedure. The CHG.indicator should light during recharging to indicate, the battery pack is normal. If this is not the result, consult your nearest JVC dealer.

A WORD ON THE EXCLUSIVE BATTERY PACKS

The battery packs are nickel-cadmium batteries and nickel-metal hydride batteries. Be sure to carefully read the caution attached to the battery pack.

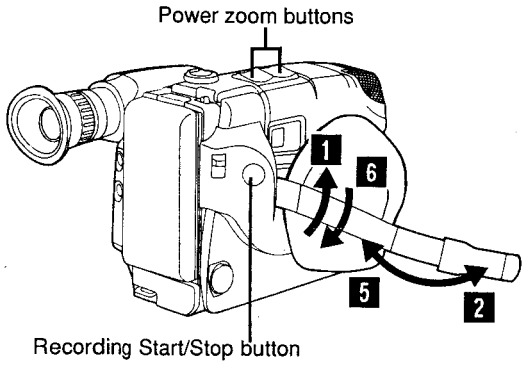


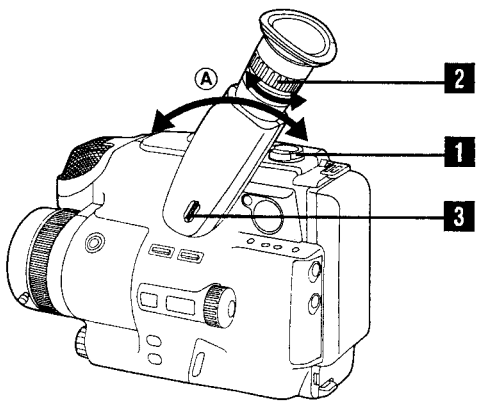
Temperature ranges:

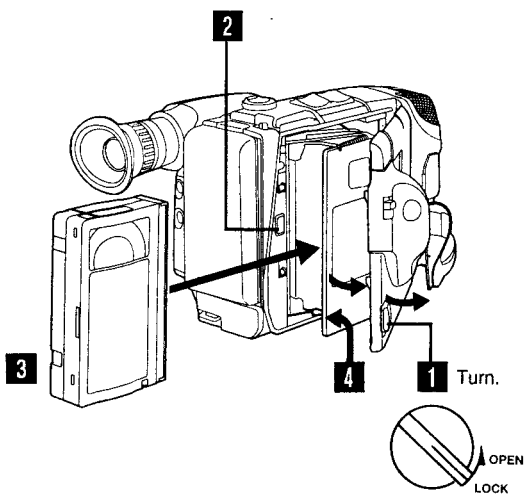
The recharging time is based on room temperature of 20°C.
The lower the temperature, the longer the recharging time.

For charging: 10°C to 35°C
For operating: 0°C to 40°C
For storing: –10°C to 30°C

PREPARATIONS (Cont'd)







ADJUSTING THE GRIP STRAP

1. Open the grip pad.
2. Separate the Velcro strip to expand the loop.
3. Pass your right hand through the loop and grasp the grip.
4. Adjust the length of the strap so that your thumb and fingers can easily manipulate the Recording Start/Stop button and power zoom buttons.
5. Refasten the Velcro strip.
6. Close the grip pad.

VIEWFINDER ADJUSTMENT

Positioning:

The viewfinder can be positioned for best viewability (Ⓐ).

Diopter adjustment:

The viewfinder lens can be adjusted to suit the operator's eyesight.

1. Set the power switch to "LOCK".
2. Turn the diopter adjustment ring until the indications in the viewfinder are clearly focused.

Brightness adjustment:

After doing 1– 2 above, focus on an object and view the image in the viewfinder.

3. Turn the adjustment dial until the viewfinder's picture is the correct brightness.

LOADING AND UNLOADING A CASSETTE

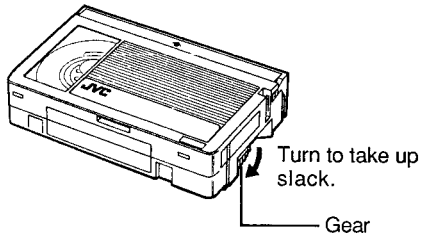
Loading

1. Turn the door lock to "OPEN", and pull open the cassette door.
2. Press EJECT. — The cassette holder pops out.
3. Insert the cassette with its label facing outward.
4. Push the cassette holder fully in.
5. Push the cassette door fully closed; it locks automatically.

Unloading

1. Turn the door lock to "OPEN", and pull open the cassette door.
2. Press EJECT. — The cassette holder pops out.
3. Remove the cassette.
4. Push the cassette holder fully in.
5. Push the cassette door fully closed; it locks automatically.

Notes:

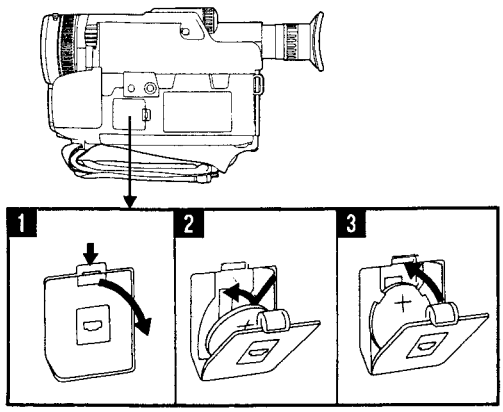


- Ensure that tape is not slack inside the cassette, then load the cassette correctly.
- Do not repeat loading and unloading of the cassette without running the tape, as this will slacken the tape, causing tape damage.
- The cassette holder can be opened even when the power is off.

CLOCK (LITHIUM) BATTERY INSERTION

Necessary for clock and date/time/age settings.

* Switch off the unit's power and remove the power suppply unit before inserting or removing the clock battery.



1. Remove the clock battery compartment cover while pressing the release tab.
2. Insert the provided lithium battery with the plus (+) side up by sliding it in the direction of the arrow, and pushing it down.
   * When removing the battery, slide it in the direction of the arrow and lift it up.
3. Close the compartment cover until it clicks in place.

Warning on lithium battery

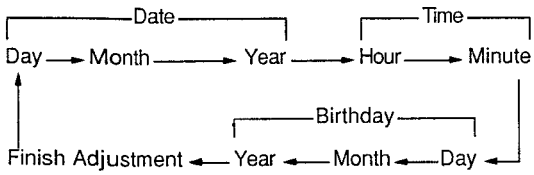
- Dispose of used battery promptly.
- Keep away from children.
- Do not disassemble and do not dispose of it in fire.

(See Warning on lithium battery, ☞ P. 2)

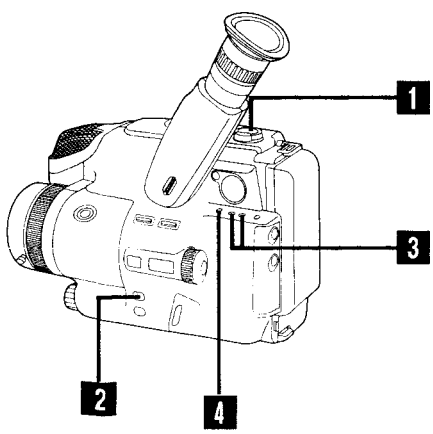
SETTING DATE/TIME/BIRTHDAY

Before adjusting the date, time and birthday for the first time or after replacing the battery.

1. Set the power switch to "RELEASE".
2. Press DISPLAY. — The day blinks.
3. Press DATE/TIME ADJ. SET (+/–) to choose the correct day.
4. Press DATE/TIME ADJ. SELECT to enter that setting and move to the next item to change, in the sequence below:



- If DATE/TIME ADJ. SELECT is kept pressed for more than 1.5 seconds, this will call up items rapidly for setting, and stops at the item where the button is released.



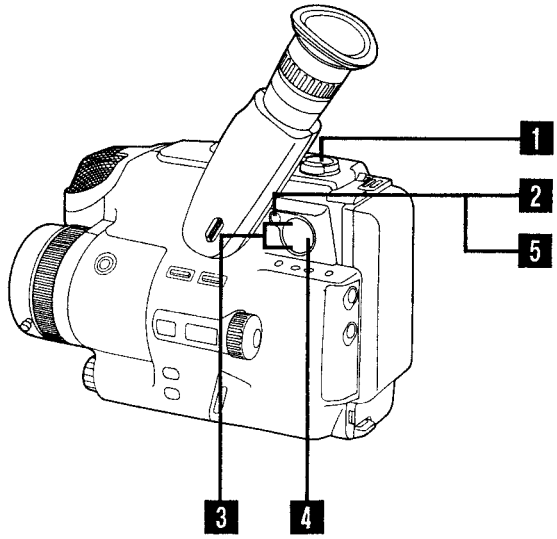
5. Procedures in steps 3 and 4 allow you to set Date and Time.
   After the Time has been set, proceed to the Birthday setting.

   Setting the "Birthday"

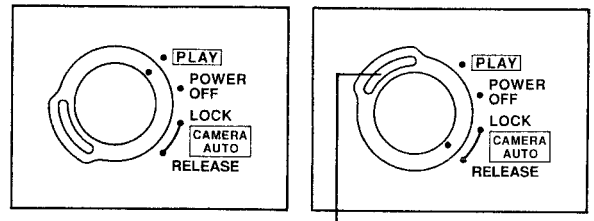
   The VideoMovie is provided with a "Birthday" memory function so that once someone's date of birth is entered into memory, the unit can display and record his or her age, automatically calculated to the current dates of the scenes.
   - Age-indication appears as follows:
     Under one-month-old ..... 1D to 31D
     Under one-year-old..... 1M to 11M
     Under 7-year-old.....1Y0M to 6Y11M
     7 and over 7-year-old..... 7Y to 99Y
6. Make the settings for the items of BIRTHDAY as described in steps 3 and 4.
7. After all items have been set, press DATE/TIME ADJ. SELECT.
   — Blinking stops, and the Date, Time and Age will be displayed.

   Notes:
   - When the Date/Time/Birthday is set for the first time, after inputting the "BIRTHDAY" data, the Date, Time and Age (automatically calculated based on the BIRTHDAY data) appear.
   - The clock begins timekeeping when the minute portion stops blinking and remains constantly lit. While the Date and Time are blinking, the clock does not keep time. Be sure to confirm the correct time when setting the Birthday.
   - When re-adjusting the data, press DISPLAY to display each item and press DATE/TIME ADJ. SET and DATE/TIME ADJ. SELECT to correct them. After adjustment is completed, the date, time and age appear for about 3 seconds, then the display returns to the mode before correcting.

MENU SYSTEM



Many recording and playback settings are done using the convenient in-viewfinder menu display.



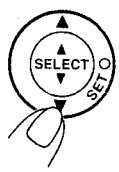
Press down on lock release button while turning to "RELEASE".

To access the Menu

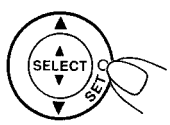
1. Set the power switch to "RELEASE" for items related to shooting, and to "PLAY" for items related to playback.
2. Press MENU ON/OFF.
   - The menu will appear in the viewfinder.
3. Press SELECT ∧ / ∨ to move the pointer to the item you want.
4. Press SET to change the status.
   - If there is more than one change to make, repeat steps 3 and 4 as necessary.
5. Press MENU ON/OFF to end.

Example:

```
►FORMAT      ►AUTO    VHS
  SVHS/VHS
 SP/LP       ►SP      LP
 TAPE        ►45MIN   30MIN
```



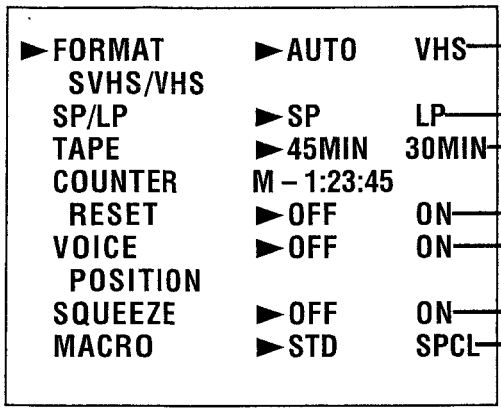

```
 FORMAT       ►AUTO    VHS
   SVHS/VHS
 SP/LP        ►SP      LP
►TAPE         ►45MIN   30MIN
```




```
 FORMAT       ►AUTO    VHS
   SVHS/VHS
 SP/LP        ►SP      LP
►TAPE          45MIN►30MIN
```

Some items can be set at any time, whenever necessary, however the ones numbered 1 2 3 below must be set prior to starting recording.

MENU: SHOOTING



1 SET THE FORMAT
Choose the recording format.
- AUTO: Automatically records in Super VHS with an S-VHS-C cassette, and in VHS with a VHS-C cassette.
- VHS: For VHS recording whether the cassette is VHS-C or S-VHS-C.

2 SET THE TAPE SPEED
Choose the tape speed that better meets your requirements.
- SP: Faster tape speed. Better for dubbing later because higher picture and sound quality are maintained.
- LP: Slower tape speed. To record 2 times longer than with SP. For more economical use of tape.

3 SET THE TAPE LENGTH
The tape remaining time is displayed in the viewfinder. Before shooting, choose the setting that corresponds to the length (time) of the tape you are using.
- 45MIN: When using a SE-C45/EC-45 cassette (45 minutes recording time in SP speed).
- 30MIN: When using a SE-C30/EC-30 cassette (30 minutes or less recording time in SP speed).

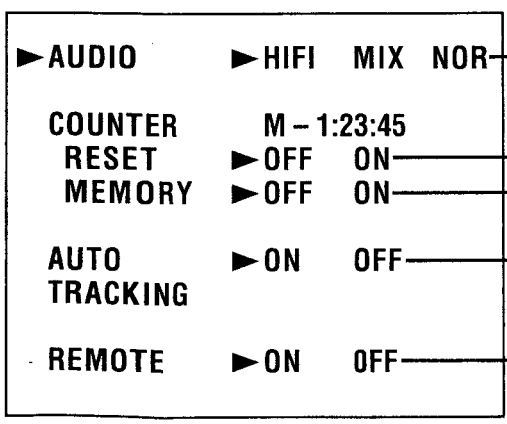
COUNTER RESET: Resets the counter to zero.

VOICE POSITION: A "wind filter" for the microphone (☞ P.21).

SQUEEZE: For "squeezed" recordings to view on wide-screen TVs (☞ P.21).

MACRO: To modify the macro range (☞ P.21).

MENU: PLAYBACK



AUDIO: To choose the audio soundtrack during playback and dubbing/editing.
- HiFi: To listen to the sound recorded on the Hi-Fi audio track.
- MIX: To listen to the sound recorded on both Hi-Fi and longitudinal audio tracks (mixed audio).
- NOR: To listen to the sound recorded on the longitudinal (normal) audio track.

COUNTER RESET: Resets the counter to zero.

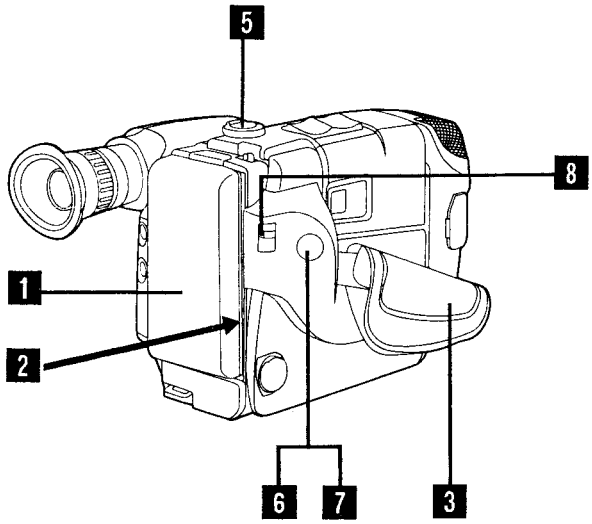
COUNTER MEMORY: Enables quick return to the tape's "zero" position; for search and editing (☞ P.23).

AUTO TRACKING: Automatic tracking or manual tracking (☞P.22). "USE ZOOM SW" appears when set to OFF. — Tracking can be adjusted using the zoom buttons.

REMOTE: To enable or disable remote control operation.

Notes:
- Counter Reset item returns to OFF when the SET button is released.
- For all items other than Counter Reset, any changes made in their status will remain until manually changed back to the original status. Settings do not automatically change back to their original status when the VideoMovie is turned off and on again.

RECORDING OPERATION

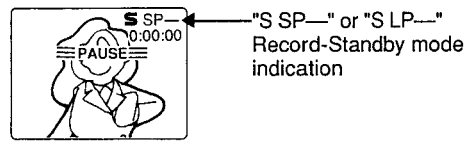


1. Preparations

1 Supply power.(☞ P.6.)
2 Insert a video cassette correctly. (☞ P.8.)
3 Adjust the grip strap. (☞ P.8.)

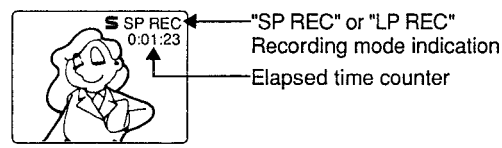
2. To enter the Record-Standby mode

4 Set SP/LP as required.(☞ P.11.)
5 Set the power switch to "LOCK" or "RELEASE".
— The power indicator lights.
— The VideoMovie enters the Record-Standby mode. The aimed-at scene will appear on the viewfinder screen.



3. To shoot the scene

6 Determine the composition by referring to the viewfinder image and press the Recording Start/Stop button.



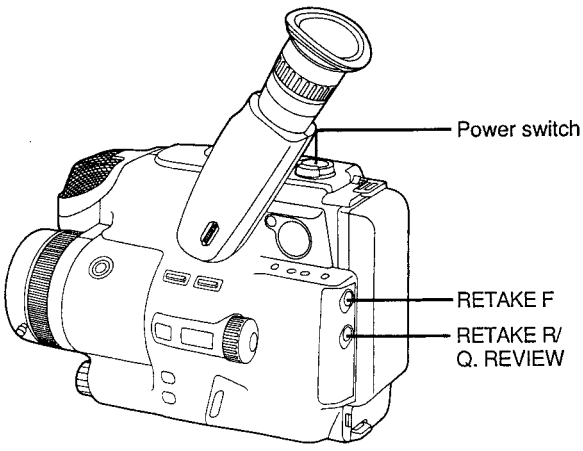
7 To stop recording temporarily, press the Recording Start/Stop button again.
- To restart recording, press the Recording Start/Stop button.
- Repeating steps 6 and 7 produces assemble recordings.

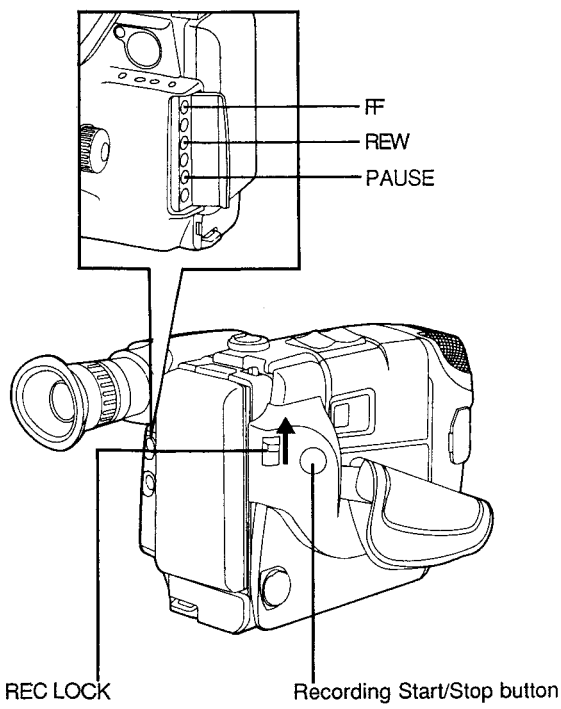
8 To turn the power off and on during shooting, use the conveniently located REC LOCK switch.

AUTO-REHEARSAL

Rehearsal mode is automatically engaged in the following situations:
The power switch is set to the "LOCK" position and;
= no cassette is loaded, or
= a cassette without its safety tab is loaded.
- Rehearsal mode is not engaged when the power switch is set to the "PLAY" position.

Notes:
- When a tape reaches its end during recording, the power switch itself off automatically if left for longer than 5 minutes.
- For a longer pause, set the power switch to off to save power.
- If the Record-Standby mode continues for longer than about 5 minutes, the unit switches itself off automatically. To restart recording, turn the power on and press the Recording Start/Stop button. This makes clean assembled recordings possible even after a long pause.
- When digital modes are engaged, there will be a decrease in resolution and the picture will appear coarser than normal.





QUICK REVIEW

If you want to review the end of the last recording for confirmation use this function.

- Keep pressing Q. REVIEW from the Record-Standby mode.
  — The tape will be rewound for about 2 seconds of program time and played back automatically for this section, after which it will pause in the Record-Standby mode for the next shot.

Note:

Distortion might occur when playback starts. This is normal.

RETAKE

While recording, you may decide to re-record certain segments. The Retake function is convenient for this.

1. Make sure the power switch is set to "RELEASE" and the VideoMovie is in the Record-Standby mode. (If not, engage the mode.)
2. Press RETAKE R or F to reach the point where you wish a new recording to start.
   - When RETAKE is released, the camera will enter the Record-Standby mode again.
3. Press the Recording Start/Stop button.
   — Recording starts.

Note:

Noise may appear during Retake. This is normal.

ASSEMBLE RECORDING TECHNIQUES

[1] To replace the battery pack during recording:

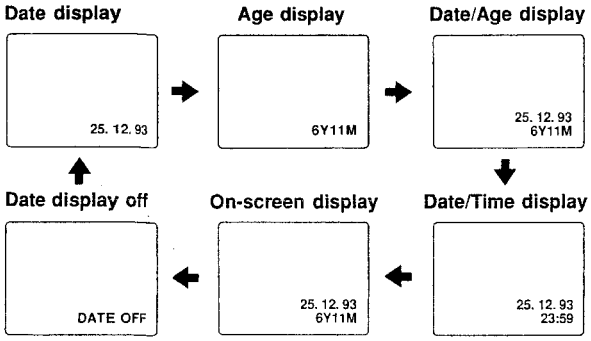
1. If the battery warning appears in the viewfinder while recording, stop recording by pressing the Recording Start/Stop button and turn off the power by sliding REC LOCK.
2. Replace the battery pack with a charged one.
3. Slide REC LOCK to turn the unit's power on again.
   — The unit will be in the Record-Standby mode.
4. Press the Recording Start/Stop button.
   — Recording starts.

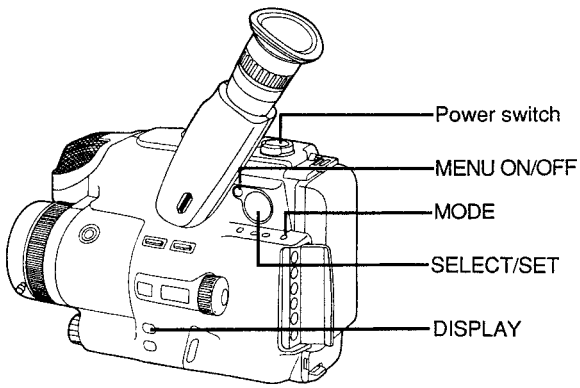
[2] To record onto a partially recorded tape:

1. Set the power switch to "PLAY" and play back the tape to a point where you wish a new recording to start.
   - Use REW or FF for faster location.
2. Press PAUSE at the located point.
   — The unit will enter the Still mode.
3. Set the power switch to "LOCK" or "RELEASE".
4. Press the Recording Start/Stop button.
   — Recording starts.

RECORDING OPERATION (Cont'd)

Date/Time/Age recording indications





MANUAL DATE/TIME/AGE RECORDING

The date/time/age can be displayed and recorded according to the selected mode.

1. Set the power switch to RELEASE.
2. Press MODE to cycle through the modes (as shown on the left).
   - The selected display mode will be recorded when it is displayed on the viewfinder screen; when it is not displayed, no display recording takes place. Pressing DISPLAY turns it ON and OFF.

AUTO DATE/TIME/AGE RECORDING

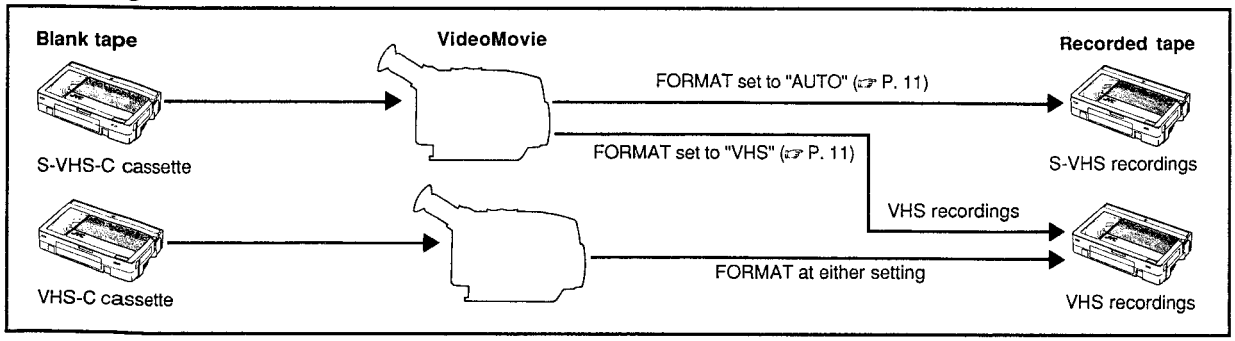
When the power switch is set to LOCK, the VideoMovie will automatically display and record the date/time/age mode that has been selected for 5 seconds at the beginning of a recording. Auto date/time/age recording takes place whenever recording is started: • After a new cassette is loaded (cassette holder has been opened and closed), and; • After the date has changed.

Notes:

- For on-screen display connect the VideoMovie to a video monitor. Press MODE to select the On-Screen Display mode. The viewfinder indications appear on the monitor screen. (☞ P. 5.)
- The on-screen display is available in the Rehearsal or Record-Pause mode.

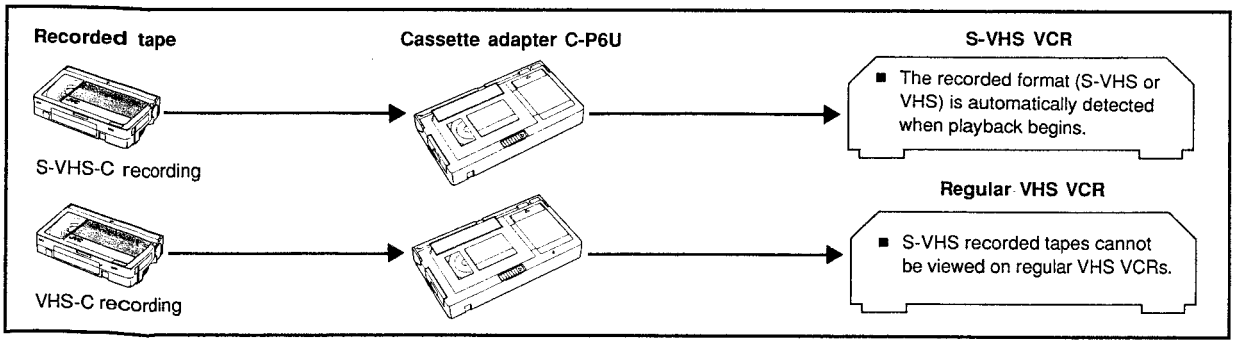
COMPATIBILITY BETWEEN S-VHS AND VHS

Recording

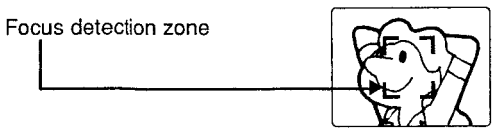


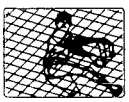
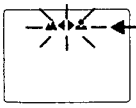
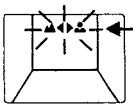
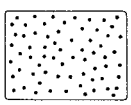
Playback

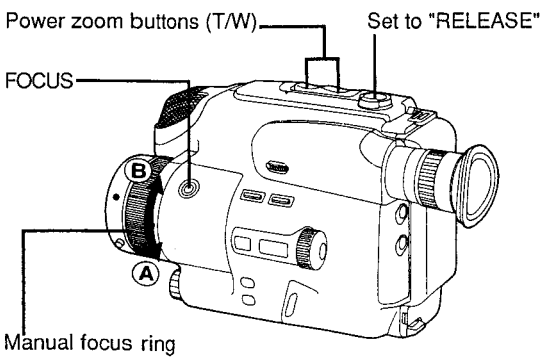
The pictures recorded with the VideoMovie can be played back by directly connecting it to a TV; and can also be played back using a VCR.

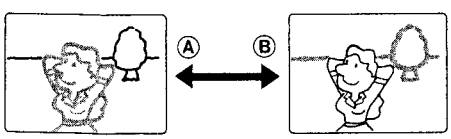

Recorded tape
Cassette adapter C-P6U
S-VHS VCR
■ The recorded format (S-VHS or VHS) is automatically detected when playback begins.
S-VHS-C recording
Regular VHS VCR
■ S-VHS recorded tapes cannot be viewed on regular VHS VCRs.
VHS-C recording

ADVANCED VIDEOGRAPHY TECHNIQUES



	Two subjects at different distances overlap in the same scene.
	Low illumination.
	The subject has no contrast (differences in brightness and darkness), such as a flat, one-color wall, or a clear, blue sky, for instance.
	Low-contrast warning. A dark object is barely visible in the viewfinder.
	Minute patterns or identical patterns that are regularly repeated.





Auto Macro - Closeups

This VideoMovie's Full Range AF system offers continuous focus from close-up to infinity.

Procedure for Macro shooting:

1. Press "W" until the lens zooms out completely.
2. Position the subject in the focus detection zone.

- For best results, increase illumination when shooting in the Macro range.

FOCUSING

Auto-focus

The rectangular focus area, shown by the indicators in the center of the viewfinder, detects focus.

CAUTION

When not in use, do not leave the VideoMovie in the Auto Focus mode with power on; otherwise light entering the lens will operate the auto-focus mechanism, consuming power.

Notes:

- If the lens is smeared or is fogged up with condensation, accurate focusing is not possible. Keep them clean. If they become dirty, wipe with a piece of soft cloth. When condensation occurs, dry them by wiping with a soft cloth or wait for conditions in which they become dry.
- Correct focus may not be obtained in these situations on the left. In such cases manual focusing should be performed to obtain proper focus.

Manual focus

(Make sure the power switch is set to RELEASE.)

For manual focus operation:

1. Press FOCUS to release the Auto Focus mode.
   — The Manual Focus indicators (▲♣) appear and the focus detection zone disappears.
2. Zoom in on a subject by pressing "T".
3. Focus onto it by turning the manual focus ring.
   - Turn the ring in the direction of the arrow (Ⓐ). The ◄ indicator blinks. It will disappear when the ring is released.
   - Turn the ring in the direction of the arrow (Ⓑ). The ► indicator blinks. It will disappear when the ring is released.
   - When the focus level cannot be adjusted any farther or closer, the indicator (▲) or the indicator (♣) will blink.
4. Determine the composition by pressing "W".

To release the Manual Focus mode (to engage the Auto Focus mode):

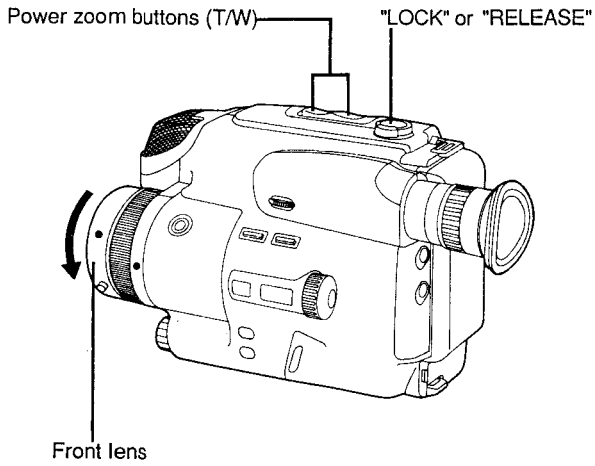
Press FOCUS, or turn the power switch to LOCK.

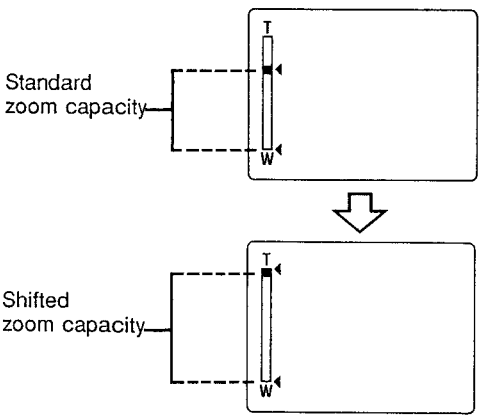
— Manual focus indicators (▲♣) disappear and the focus detection zone appears.

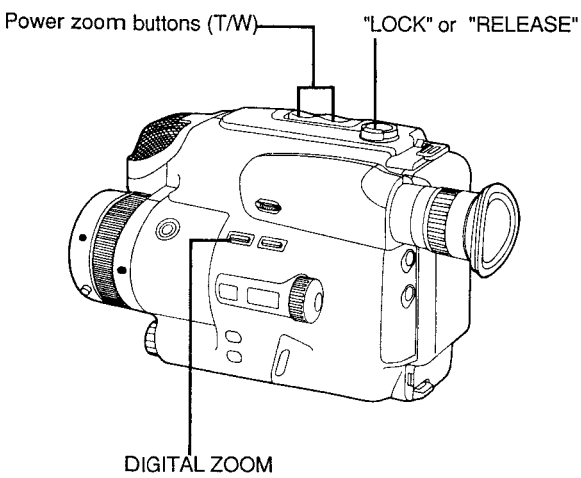
Notes:

- When you use the Manual Focus mode, be sure to focus the lens in the maximum telephoto position. If you focus in on a certain subject in the wide-angle position, sharply-focused images cannot be obtained when zoomed up because the depth- of-field is reduced at longer focal lengths.
- When focusing manually, make neccessary viewfinder adjustments (☞ P. 8), then focus in.

ADVANCED VIDEOGRAPHY TECHNIQUES (Cont'd)







ZOOMING

Pressing the power zoom buttons ("T" and "W") will vary the focal length of the lens. Maximum magnification is approximately 8x.

Procedure:

- Press T : Zooms in on the image, brings it "nearer".
- Press W : Zooms out, "backs away" from the image.

DIGITAL ZOOM

Digital zoom offers double the magnification of normal zoom. (Maximum approx. 16x)

To engage Digital Zoom:

1. Press DIGITAL ZOOM.
   - The zoom level in the viewfinder's bar indicator will change to show the added zoom capacity.
2. Press T/W to zoom in/out .

To disengage Digital Zoom:

Press DIGITAL ZOOM again.

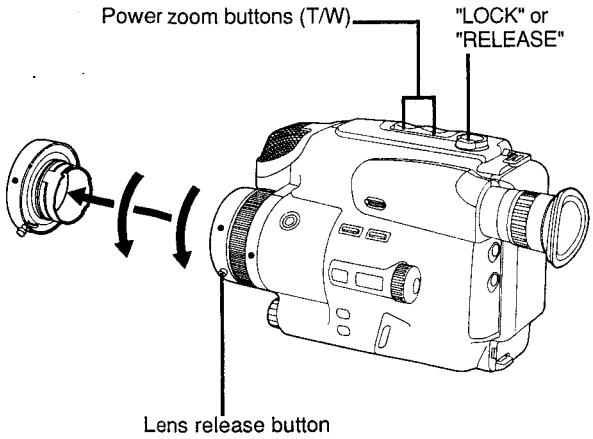
The VideoMovie's front lens can be "shifted" to provide extra zoom capability whenever needed. Maximum magnification is approximately 22x.

Procedure:

1. Turn the front lens in the direction of the arrow until it pops out slightly.
   - The zoom bar indicator in the viewfinder will change to show the added zoom capability.
2. Press T/W to zoom in/out.
   - When the lens is shifted, the VideoMovie may momentarily go out of focus.

Notes:

- Focusing may become unstable during the zooming-in operation. In this case, first zoom-in in the Recording Standby mode then, after using the manual focusing (☞ P. 15) to hold the focus fixed, zoom in or out in the Record mode.
- When shooting low-contrast subjects in the Zoom-in mode, the VideoMovie automatically zooms out with the low contrast indicator blinking and focus being performed.
- When using shifted zoom at maximum zoom-in position under conditions of very low light, the outside edge of the picture may appear slightly out of focus. This is a normal condition caused by inherent lens aberrations.



ULTRA-WIDE ANGLE

To get more people into group shots, fit more picturesque scenery into vacation footage, etc.

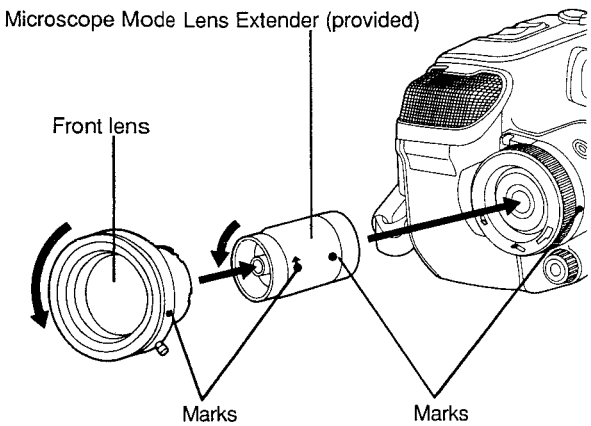
1. Turn the front lens in the direction of the arrow until it pops out slightly.
2. Press the lens release button while turning the lens in the direction of the arrow. The lens will release.
   - Now you have an ultra-wide angle of view.
   - The Digital Zoom function is engaged automatically; use the zoom buttons to precisely frame the scene you are recording.

To re-attach the front lens:

Align the positioning marks (red dots), push the lens in fully, and turn the lens in the opposite direction until it catches.

Notes:

- Clean the lens with a blower brush or lens cleaning paper before re-attaching it to the VideoMovie.
- In Ultra-Wide, the "warping" that may appear in the picture (especially at the outer edges) is a natural phenomenon and is not a malfunction of the unit.



MICROSCOPE MODE

Using the provided Microscope Mode Lens Extender, you can magnify tiny objects to screen-filling size. Something measuring only 1 cm will fill the screen; the image displayed on a 71 cm TV screen will be about 121 times its original size.

1. Detach the front lens using the same procedure as Ultra-Wide.
2. Align the positioning marks, insert the lens extender until it fits snugly, and turn in the direction of the arrow until it catches.
3. Align the positioning marks and attach the front lens to the lens extender as illustrated.
4. Focus using the manual focus ring or by changing the distance between the lens and the object being shot.
   - Object must be located approximately 92 mm from the front lens.
   - The Digital Zoom function is engaged automatically; use the zoom buttons to increase magnification up to twice as much. (Max. 242x magnification on a 71 cm TV.)

TV/Monitor Screen Size	Maximum Magnification with Microscope Mode	
	Optical	Digital (2x)
53 cm	97x	195x
71 cm	121x	242x
94 cm	172x	344x

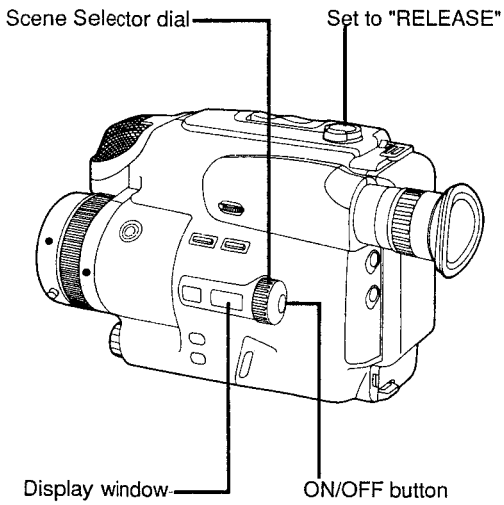
Notes:

- The use of a tripod is recommended.
- When using indoors, additional lighting is recommended.
- The four corners of the picture may appear dark.

When finished using Microscope Mode:

Detach the front lens and Microscope Mode Lens Extender, and re-attach the front lens to the VideoMovie. Autofocus automatically re-engages.

ADVANCED VIDEOGRAPHY TECHNIQUES (Cont'd)



SCENE SELECTOR

A variety of creative shooting effects are accessible with this control dial.
(Make sure the power switch is set to RELEASE.)

To engage any of the effects:

1. Turn the selector dial so that the desired effect appears in the indicator window.
2. Press the mode ON/OFF button in the center of the dial.
   - "SCENE" appears in the viewfinder.

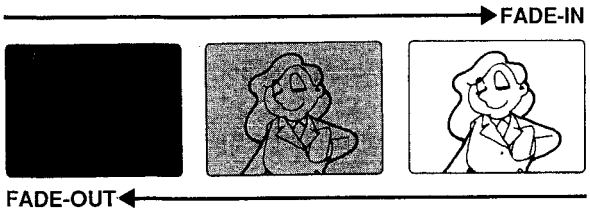
To cancel the effect:

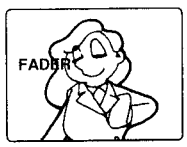
Press the ON/OFF button again.
Turning the selector dial, or turning the power switch to LOCK will also cancel the effect.

Notes:

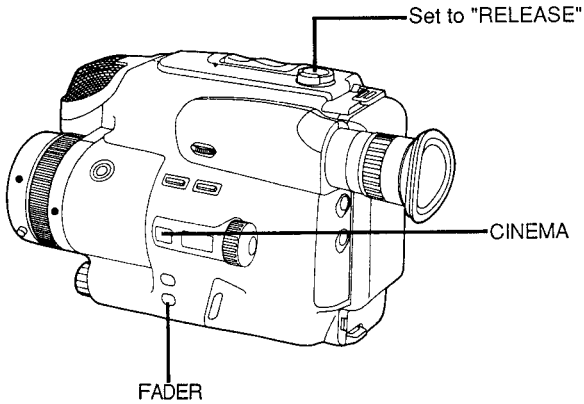
- Only one Scene Selector effect can be activated at a time.
- When SLO-SHUTTER is activated, the initial picture may be too bright. If so, manually adjust brightness with the manual iris control (☞ P.20).
- The manual iris control cannot be used while PORTRAIT or SPORTS are activated.
- When manual iris is used while FRONT-LIT or BACK-LIT are activated, automatic adjustment is disabled.
- Digital Image Stabilizer cannot be used while STROBE, CLASSIC FILM or SLO-SHUTTER are activated.
- When SLO-SHUTTER is activated, Auto Focus is automatically canceled. Please adjust the focus manually.

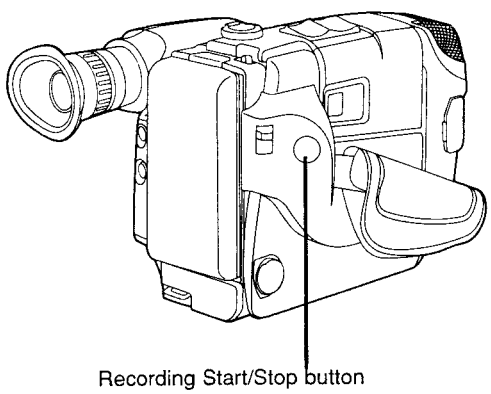
Effect		What it does/When to use
Name	Symbol	
PORTRAIT		Reduces depth-of-field so the background becomes blurry while the subject remains clearly focused. Use it for beautiful portrait shots.
SPORTS		Uses high shutter speed to clearly capture fast-moving action with less blur. Clarity is especially noticeable during slow motion playback on a video deck. Great for sports, races, etc.
FRONT-LIT		Compensates for washed-out images that can occur with subjects that are spotlighted from the front. Ideal for weddings, stage plays, etc.
BACK-LIT		Compensates for backlighting that may cause subjects to appear too dark; like a person standing in front of a window, with the sun to his back, etc.
STROBE		Successive still images are displayed in timed intervals. (Sound remains unchanged.) Similar to that used in some music videos.
CLASSIC FILM		Faster-speed strobe that offers the vintage look of a film being shown on a movie projector. Using it with Cinema Mode (☞ P.19) creates an authentic movie theater look.
SLO-SHUTTER		Maximizes available light for 1 lux sensitivity. Makes shooting possible in extremely low-light situations. When used with Snapshot (☞P.20), the trailing images offer an artistic looking effect. (Under certain conditions, the picture may appear somewhat unnatural. However this is normal and not due to any defect of the unit.)
TWILIGHT		Disengages the auto gain control and auto focus (manual focus mode is activated), and automatically sets focus to infinity. Dusk and twilight scenery, fireworks, etc. look more natural and dramatic.

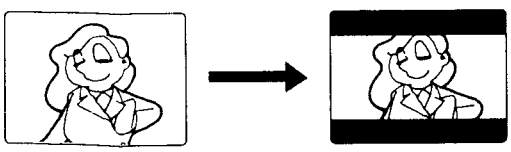




Viewfinder







Cinema mode

FADER

This VideoMovie incorporates a fader function which allows smooth video and audio fade-in and fade-out to a black blank screen.
(Make sure the power switch is set to RELEASE.)

Fade-in

1. Press FADER.
   — The VideoMovie enters into the Fade-Standby mode and "FADER" appears.
2. Press the Recording Start/Stop button.
   — The screen immediately becomes blank and recording begins. Fade-in starts at the moment the Recording Start/Stop button is released.
   - If the button is not released, the screen will remain blank and be recorded as long as the button is kept pressed.

Fade-out

1. Press FADER in the Recording mode.
   — The VideoMovie enters the Fade-Standby mode and "FADER" appears.
2. Press the Recording Start/Stop button.
   — The viewfinder indications start blinking. Fade-out starts and will be completed in a few seconds.
   - When completed, the VideoMovie enters the Record-Standby mode automatically. At this time, if the button is not released, the screen will remain blank and be recorded as long as the button is kept pressed.

Note:
Viewfinder indication "FADER" is not recorded.

CINEMA MODE

This VideoMovie incorporates a "Cinema" mode recording function which allows you to record black bars at the top and bottom of the screen to produce a cinema-like "wide-screen" effect.

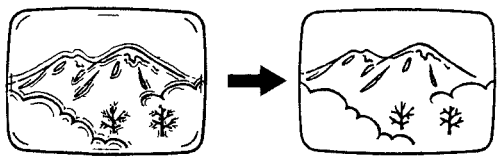
(Make sure the power switch is set to RELEASE.)

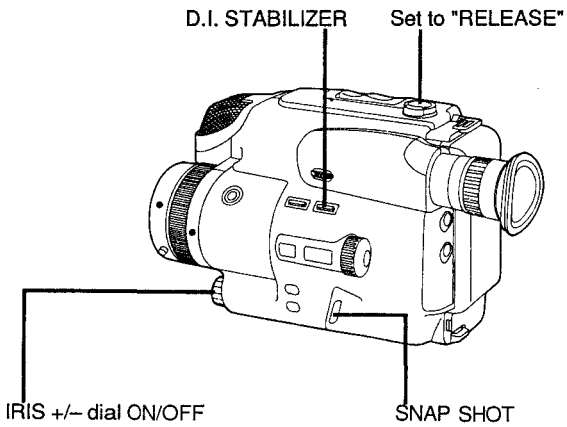
To engage the Cinema mode:
Press CINEMA.

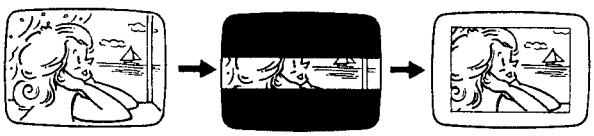
To restore the normal screen:
Press CINEMA again.

Notes:
- Cinema mode can be engaged only in the Record-Pause, Record or Rehearsal mode.
- Cinema mode can be used in combination with Scene Selector effects for added variety.

ADVANCED VIDEOGRAPHY TECHNIQUES (Cont'd)







"Shutter" effect Photo-like still

MANUAL IRIS CONTROL

This VideoMovie offers automatic adjustment of iris to provide the best available picture quality, but this can be overidden in cases when manual control of iris is desireable.

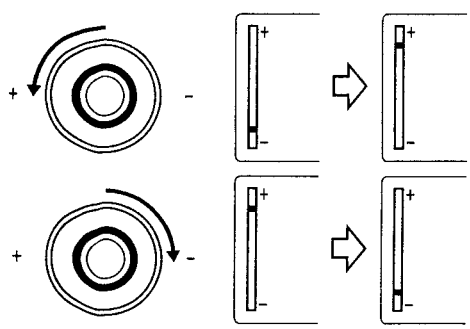
(Make sure the power switch is set to RELEASE.)

For manual iris control:

1. Press the AUTO/MANUAL button.
   - A brightness indicator bar will appear in the viewfinder.
2. Turn the IRIS +/- dial to adjust picture brightness.

To re-activate automatic iris control:

Press the AUTO/MANUAL button again.



DIGITAL IMAGE STABILIZER

To compensate for the unstable images caused by hand shake (especially noticeable at high zoom ranges), this VideoMovie incorporates a Digital Image Stabilizer .

To engage the Digital Image Stabilizer:

Press D.I. STABILIZER.

- will appear in the viewfinder.

To disengage the Digital Image Stabilizer:

Press D.I. STABILIZER again.

Notes:

- Accurate stabilization may not be possible if hand shake is excessive, or when shooting the following: • Subjects with vertical or horizontal stripes • Low contrast subjects • Dark/dim subjects • Subjects with excessive backlighting • Scenes with movement in various directions • Low contrast backgrounds
- Digital Image Stabilizer (DIS) cannot be used while Strobe, Classic Film or Slow Shutter are activated. When any of these turned on while DIS is already on, the indicator blinks, telling you that DIS is unable to function.

SNAP SHOT MODE

This interesting feature lets you record a white-bordered digital still that looks (and sounds) just like a photograph is being taken. Use it to liven up recordings of parties, weddings, graduations, and so on.

(Make sure the power switch is set to RELEASE.)

To engage the Snap shot mode:

Press SNAP SHOT.

- When engaged during recording, there will be a momentary camera shutter-type blackout, a shutter sound effect is recorded on the tape, and a white-bordered still image is displayed and recorded.
- When engaged during pause, a still image will be displayed, and when the Recording Start/Stop button is pressed, only the "snap shot" will be recorded.
- The displayed "snap shot" remains until the SNAP SHOT button is pressed again.

To disengage the Snap shot mode:

Press SNAP SHOT again.

Turning the power switch to LOCK also disengages this mode.

- Snap shot mode can be used in combination with Scene Selector effects for added variety.
- Date/time/age display will disappear during Snap shot mode.

FORMAT	►AUTO	VHS
SVHS/VHS		
SP/LP	►SP	LP
TAPE	►45MIN	30MIN
COUNTER	M – 1:23:45	
RESET	►OFF	ON
►VOICE	OFF	►ON
POSITION		
SQUEEZE	►OFF	ON
MACRO	►STD	SPCL

VOICE POSITION

When set to ON, this function cuts low-level audio frequencies like the noise sometimes caused by gusts of wind as they hit the microphone.
(Make sure the power switch is set to RELEASE.)

To engage Voice Position:
Set to ON in the viewfinder menu (☞ P.11).
- ◖ will appear in the viewfinder.

To disengage Voice Position:
Set to OFF in the viewfinder menu.

FORMAT	►AUTO	VHS
SVHS/VHS		
SP/LP	►SP	LP
TAPE	►45MIN	30MIN
COUNTER	M – 1:23:45	
RESET	►OFF	ON
VOICE	►OFF	ON
POSITION		
►SQUEEZE	OFF	►ON
MACRO	►STD	SPCL

16:9 SQUEEZE MODE

When set to ON, this function "squeezes" the picture laterally so they can be viewed (automatically unsqueezed) on wide-screen TVs to become available in the future.
(Make sure the power switch is set to RELEASE.)

To engage Squeeze Mode:
Set to ON in the viewfinder menu (☞P.11).
- "SQUEEZE" will appear in the viewfinder.
- The picture in the viewfinder (and the recorded image) will be squeezed.

To disengage Squeeze Mode:
Set to OFF in the viewfinder menu.

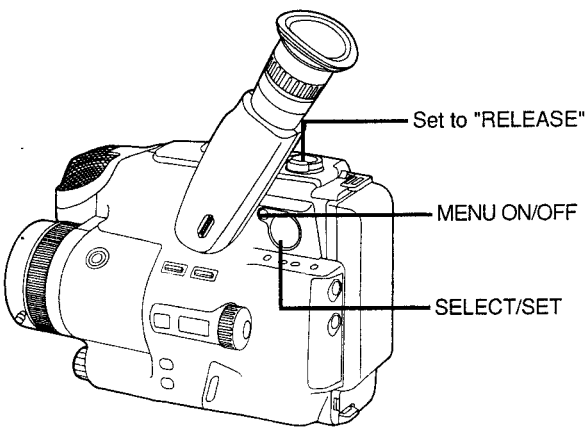
FORMAT	►AUTO	VHS
SVHS/VHS		
SP/LP	►SP	LP
TAPE	►45MIN	30MIN
COUNTER	M – 1:23:45	
RESET	►OFF	ON
VOICE	►OFF	ON
POSITION		
SQUEEZE	►OFF	ON
►MACRO	STD	►SPCL

MACRO ADJUST

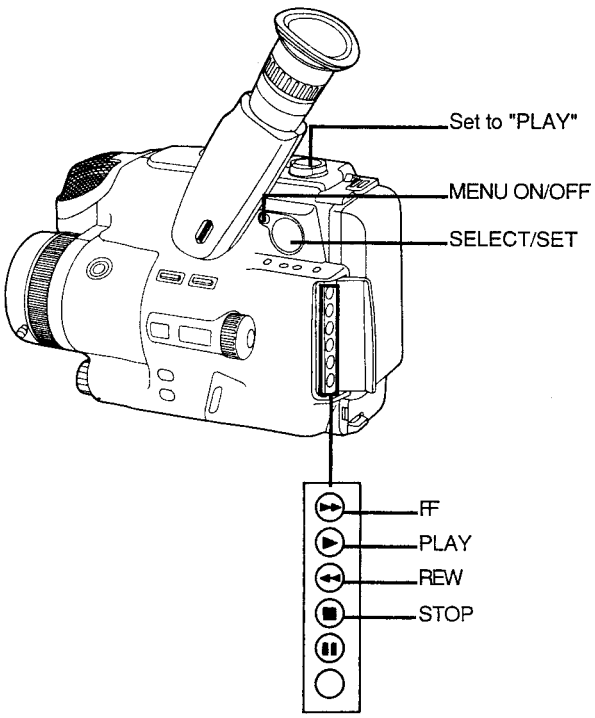
When set to SPCL, this function allows the lens to focus only on objects more than 5cm away from the lens.
(Make sure the power switch is set to RELEASE.)

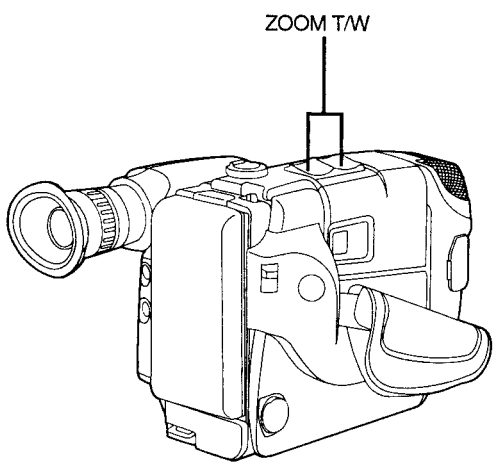
To adjust Macro mode:
Set to SPCL in the viewfinder menu (☞ P.11).
- Autofocus will not acknowledge objects closer than 5cm.

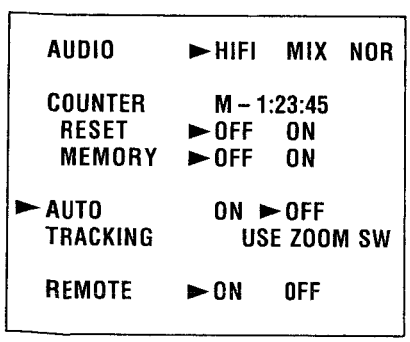
To return Macro to standard:
Set to STD in the viewfinder menu.



PLAYBACK







The VideoMovie permits playback of recorded "S-VHS-C" and "VHS-C" video cassettes.
For connections refer to pages 24, 25 and 26.

PLAYBACK OPERATION

1. Preparations

1 Supply power. (Battery or AC operation: ☞ P.6 and 7.)
2 Insert a pre-recorded S-VHS-C or VHS-C cassette.
- Make sure tape is not slack inside the cassette, then load cassette correctly. ☞ P. 8.

2. To playback a cassette

3 Set the power switch to "PLAY".
— The power indicator lights.
4 Press PLAY.
— Playback starts and playback picture appears on the viewfinder screen and connected TV.

3. To stop playback

5 Press STOP.
- After about 5 minutes in Stop mode, the VideoMovie switches itself off automatically.

REWIND OR FAST-FORWARD THE TAPE

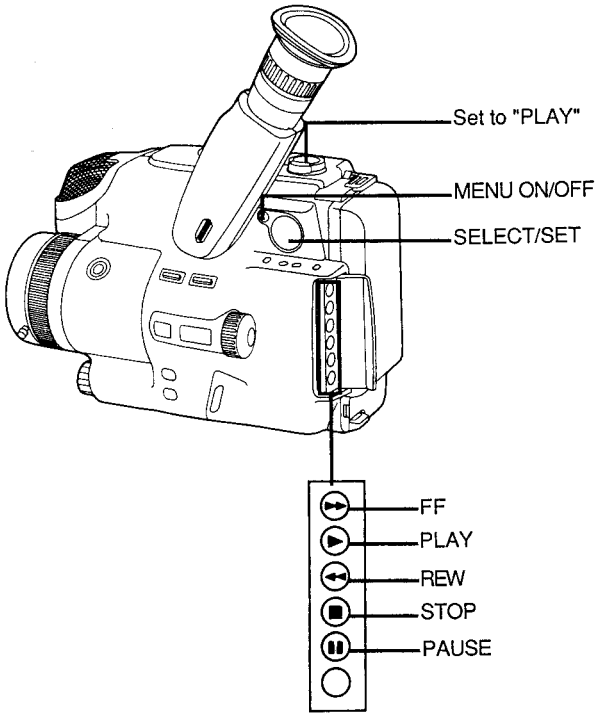
Rewind the tape:
Press REW less than about 2 seconds in the Stop mode.
Fast-forward the tape:
Press FF less than about 2 seconds in the Stop mode.
For high-speed REW or FF the tape:
Press REW or FF more than about 2 seconds and release it.
— The elapsed time counter changes to "-:--:--".
Note:
The elapsed time counter indication and counter memory function (☞ P.23) do not function when using the high-speed REW or high-speed FF mode.

MANUAL TRACKING

Optimal tracking is usually maintained by the Auto Tracking system. If noise bars appear on the screen, the tracking needs to be adjusted manually.

1 Set AUTO TRACKING to "OFF" in the viewfinder menu (☞ P. 11)
2 Press ZOOM "T" and "W" to adjust to the best picture possible.
- To re-engage Auto Tracking, set AUTO TRACKING to "ON".

Note:
For tapes recorded on another videocamera or VCR, tracking adjustment may not be effective.



STILL PLAYBACK

Press PAUSE during playback.

— The picture stops on the screen.

- After about 5 minutes of still playback, the VideoMovie enters the Stop mode automatically for tape protection and switches itself off.

SHUTTLE SEARCH

Fast-speed forward playback:

Press FF in the Play mode.

— Playback will be speeded up to 3 times normal speed in the SP mode, 7 times in the LP mode.

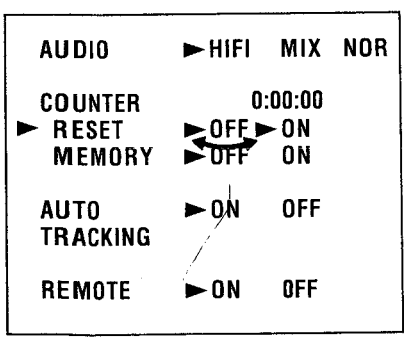
Fast-speed reverse playback:

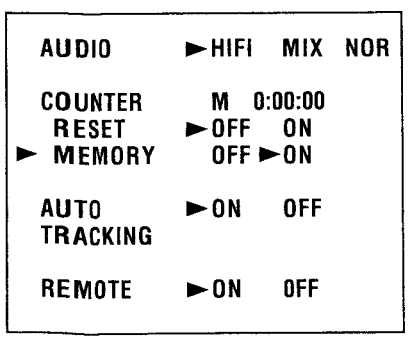
Press REW in the Play mode.

— The tape will be played back in the reverse direction at 3 times normal speed in the SP mode, 7 times in the LP mode.

Notes:

- For brief fast-speed searching, keep FF or REW pressed for more than 2 seconds; when you release the button, the Search mode will be cancelled.
- Noise bars will appear and pictures may become monochrome while in Still Playback or Shuttle Search. This is not due to any defect of the unit.





COUNTER MEMORY FUNCTION

This VideoMovie incorporates a counter memory function which facilitates locating a specific tape segment.

1. Set COUNTER RESET to "ON" in the viewfinder menu (☞ P. 11).
   — Resets the counter to "0:00:00".
2. Set COUNTER MEMORY to "ON" in the viewfinder menu (☞ P. 11) — "M" appears.
3. After recording or playback, press STOP, then REW.
   — The tape will automatically stop at the counter reading of around "0:00:00".
4. Press PLAY. — Playback starts.

Notes:

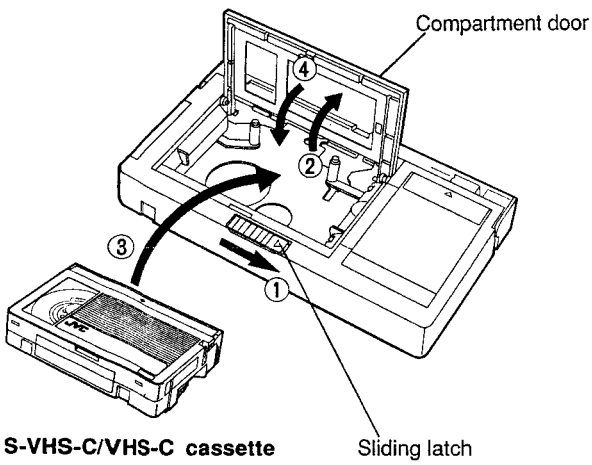
- The counter memory function is effective in the Fast Forward mode as well.
- To cancel the memory function, set COUNTER MEMORY to "OFF". "M" will disappear.
- When the power supply unit is disconnected, the counter memory function is instantly cancelled.
- The counter memory function is not effective when using the high-speed FF or high-speed REW (☞ P.22).
- The counter memory function is not effective when the tape rewinds from the end: the VideoMovie automatically enters the high-speed REW mode, switching the counter indication to "-:--:--".

USING THE CASSETTE ADAPTER (optional)

By using the Cassette Adapter, an S-VHS-C or a VHS-C video cassette recorded with this VideoMovie can be played back with any deck-type S-VHS video recorder (deck-type VHS video recorders can play back only cassettes recorded in VHS). Also, either an S-VHS-C or a VHS-C video cassette installed in the cassette adapter is fully compatible for both recording and playback on any deck-type S-VHS or VHS video recorder.

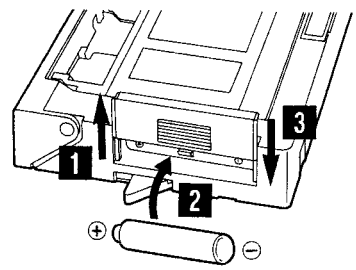
Note:
Only compact video cassette tapes marked S-VHS-C or VHS-C can be used with the Cassette Adapter.

C-P6U Cassette Adapter
Being battery-operated, the C-P6U performs tape loading and unloading automatically.

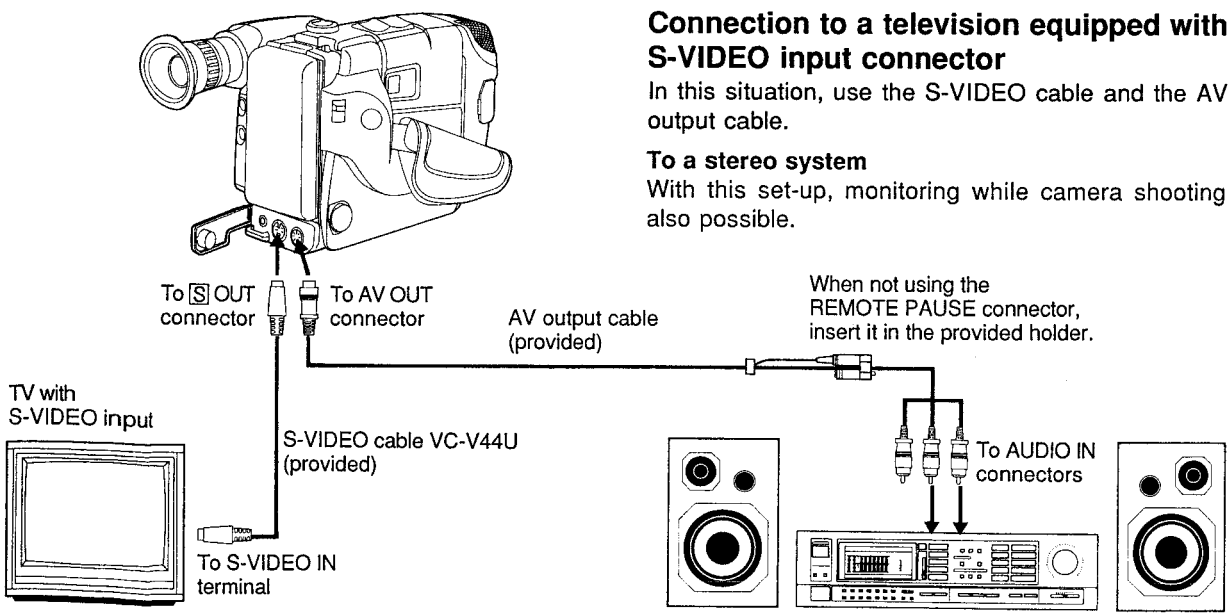


Note:
During special-effects playback (slow motion, still frame, etc.) the picture may vibrate or noise bars may appear on the screen.

Inserting the battery into the cassette adapter
1. Remove the battery cover by sliding it up.
2. Install one "R6" battery.
3. Reattach the cover.



CONNECTIONS FOR PLAYBACK


To S OUT connector
To AV OUT connector
AV output cable (provided)
When not using the REMOTE PAUSE connector, insert it in the provided holder.
TV with S-VIDEO input
S-VIDEO cable VC-V44U (provided)
To AUDIO IN connectors
To S-VIDEO IN terminal

Connection to a television equipped with S-VIDEO input connector

In this situation, use the S-VIDEO cable and the AV output cable.

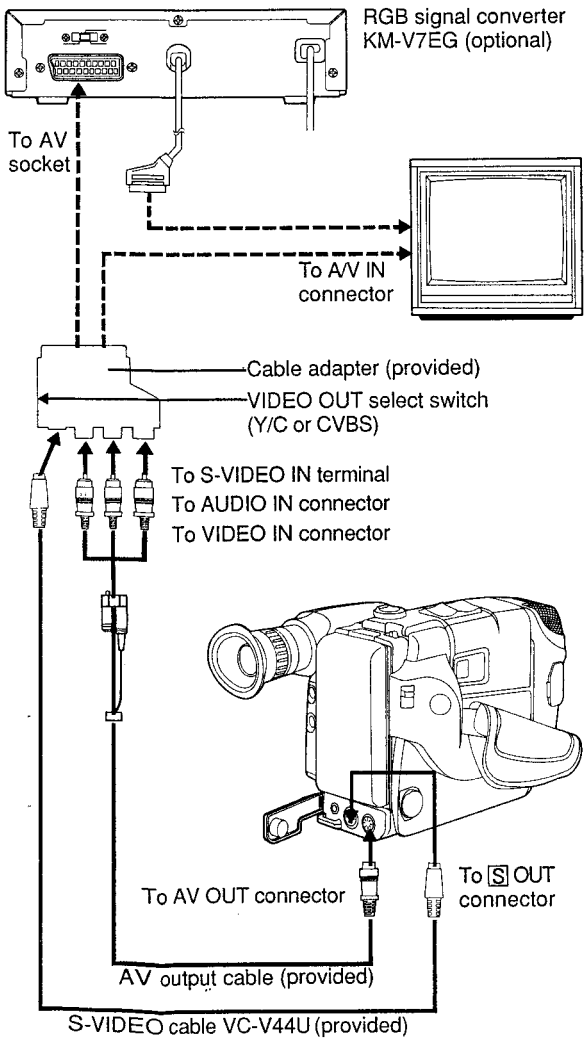
To a stereo system
With this set-up, monitoring while camera shooting also possible.

Procedure

- Connect the [S] OUT connector of the VideoMovie to the S-VIDEO IN terminal of the S-VIDEO equipped TV receiver.
- Connect the AV OUT connector of the VideoMovie either to the TV receiver's AUDIO IN connectors or the AUX IN or TAPE MONITOR terminals of an amplifier.
- Connect the AV OUT connector of the VideoMovie to the AV socket of the S-VIDEO equipped TV receiver.

Application

- With this setup, you can enjoy prerecorded S-VHS Hi-Fi tapes in stereo while viewing them on an S-VIDEO-equipped TV receiver.
- If the TV receiver is not equipped with a 4-pin S-VIDEO connector, this stereo-system connection is not possible.
- If your TV has the 21-pin AV input connector (SCART), use the provided cable adapter.


RGB signal converter KM-V7EG (optional)
To AV socket
To A/V IN connector
Cable adapter (provided)
VIDEO OUT select switch (Y/C or CVBS)
To S-VIDEO IN terminal
To AUDIO IN connector
To VIDEO IN connector
To AV OUT connector
To [S] OUT connector
AV output cable (provided)
S-VIDEO cable VC-V44U (provided)

CAUTIONS:

- This VideoMovie has a wide dynamic range in the hi-fi audio mode. It is recommended that you check the maximum level if you are going to listen to the hi-fi audio signals through a stereo amplifier. A sudden surge in speaker input may cause speaker damage.
- Some speakers and televisions are specially shielded to prevent television interference. If neither is shielded, do not place the speakers adjacent to the TV set, otherwise the video playback picture will have interference.

Connection to a television equipped with audio/video input connector

In this situation, use the AV output cable.

- Simply connect the AV OUT connector of the VideoMovie either directly to the VIDEO and AUDIO IN connectors of the television using the provided AV output cable, or to a KM-V7EG RGB signal converter (optional) and the RGB signal converter to the RGB-compatible AV IN connector of the television.
- Set the VIDEO OUT select switch of connector as required: either to "CVBS" (with the direct TV connection) or to "Y/C" (with the RGB converter connection).

Notes:

- The KM-V7EG (optional) enables the separated Y/C signal to be converted into an RGB signal so the superb quality of Super VHS pictures is available.
- When a "CVBS" signal is input to the KM-V7EG, it is output as a "CVBS" signal from the KM-V7EG.
- When using the KM-V7EG, use the provided cable adapter.

If the TV is also equipped with a S-VIDEO IN terminal:

You can also connect the VideoMovie's S-OUT connector to the TV's S-VIDEO IN (or S-VHS IN) terminal using the provided S-VIDEO cable. This can improve playback picture quality.

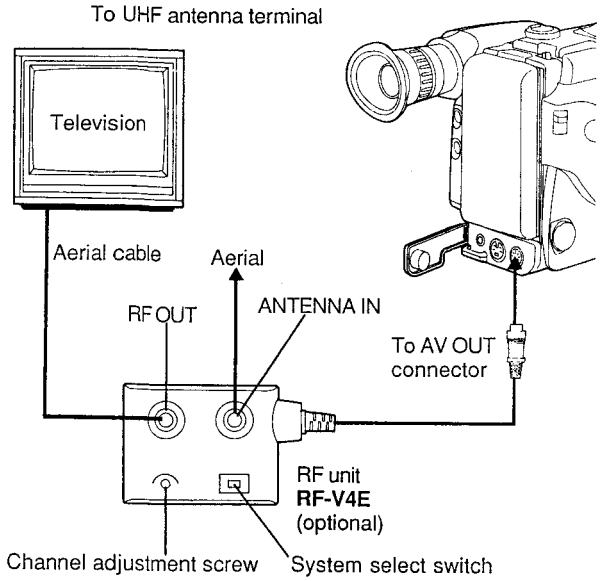
VIDEO OUT select switch

Selects the signal output via AV OUT connector.

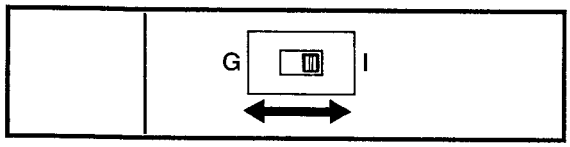
Y/C: Set to this position to supply an S-VHS signal (Y/C separated video signals) to a component connected to the AV connector. (Set the KM-V7EG to Y/C.)

CVBS: Set to this position to supply an ordinary video signal (composite video signal) to a component connected to the AV connector. (Set the KM-V7EG to COMP.)

CONNECTIONS FOR PLAYBACK (Cont'd)



■ **TV system select switch (I/G)**
When you use a TV receiver built on the British PAL standard, shift the system select switch to "I".



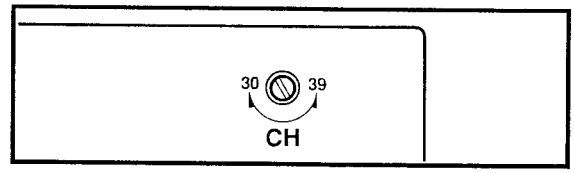
PRECAUTIONS FOR RF UNIT
- For exclusive use with the VideoMovie.
- Do not disassemble or remodel the RF unit
- Do not expose it to strong shocks.
- Unplug the connected equipment during lightning storms. (Never touch the aerial cable.)

Connection to a television not equipped with A/V input connector

For this situation, use the optional RF unit.

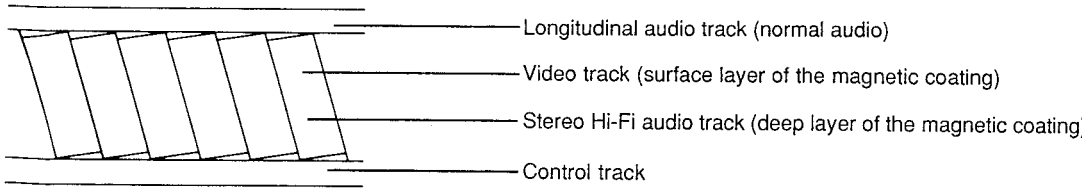
1. Remove the aerial cable from the TV receiver.
2. Connect the aerial cable to the ANTENNA IN terminal of the RF unit.
3. Connect the RF OUT terminal of the RF unit to the aerial terminal of the TV receiver using the provided aerial cable.
4. Connect the VIDEO/AUDIO INPUT cable of the RF unit to the AV OUT connector of the VideoMovie.

■ **RF converter channel adjustment screw**
To make this adjustment, remove the small cap on the back of the RF unit and turn the adjustment screw with a screwdriver to tune in a vacant channel. The RF unit permits playback of video and audio recordings through a TV receiver. The signals from the RF unit are viewed through a vacant channel not used for broadcasting in your area. The output frequency of the RF converter has been set to correspond to a broadcast on UHF channel 36. To view playback pictures from the VideoMovie with your TV receiver, tune its specified AV channel to UHF channel 36. If channel 36 is employed for broadcasting in your area, readjust the RF converter output channel to one of the vacant channels between 30 and 39.



When monitoring audio during playback

Tape pattern recorded with the VideoMovie

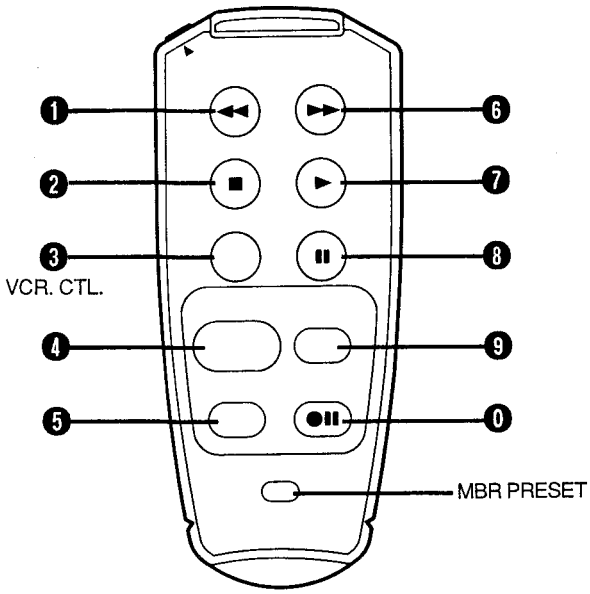

Longitudinal audio track (normal audio)
Video track (surface layer of the magnetic coating)
Stereo Hi-Fi audio track (deep layer of the magnetic coating)
Control track

The Hi-Fi and normal soundtracks are recorded simultaneously.

Set the MENU according to the audio track you wish to listen to. (☞ P. 11)
- When playing back a tape containing the same soundtrack on both hi-fi and normal audio tracks, a slight time lag is sensed between the two sound tracks, probably with some distortion, in the MIX position. Therefore, in such a case, use the NORM or Hi-Fi position.

CAUTIONS:
- The Hi-Fi soundtrack recorded with the VideoMovie cannot be reproduced with video equipment other than Hi-Fi VHS.
- Tapes recorded with a conventional stereo video recorder produce monaural sound when played back with the VideoMovie.

EDITING TECHNIQUES



VCR CODE LIST

VCR BRAND NAME	BUTTONS (A) (B)
JVC A	0 1
B	0 2
C	0 3
PHILIPS	1 0
	0 8
	1 1
	0 7
	0 1
	0 2
	1 6
	3 3
FERGUSON	0 4
	0 5
	3 6
BLAUPUNKT	1 3
PANASONIC	1 3
	1 4
	1 1
	0 7
	1 5
SELECO, REX	0 1
	0 2

VCR BRAND NAME	BUTTONS (A) (B)
SHARP	1 8
	1 9
TOSHIBA	2 0
	2 1
HITACHI	2 2
	2 3
MITSUBISHI	2 4
	2 5
AKAI	2 6
	2 7
SONY	2 8
	2 9
	3 0
	3 1
SANYO	3 2
	3 8
	3 9
	4 0
NEC	3 4
	3 5
THOMSON,	0 1
TELEFUNKEN	0 2
SABA	0 4
NORDMENDE	3 6

- Although the provided remote control unit is compatible with JVC VCRs, as well as many VCR models manufactured by others, it is possible that the provided remote control will not work with your VCR or may offer limited functions.

MBR (Multi-Brand Remote Control)

The provided MBR unit can operate this VideoMovie from a distance as well as the basic operations (PLAY, STOP, PAUSE, FF, and REW) of your VCR. This remote control unit is useful when dubbing from the VideoMovie to your VCR.

- Install a battery before using the remote control unit. ☞ P.31.

A. To operate the VideoMovie

1. Turn the VideoMovie's power ON.
2. Press the button corresponding to the function you want to operate.

B. To operate your VCR

[1] **To set the remote control unit to correspond to the brand of your VCR:**

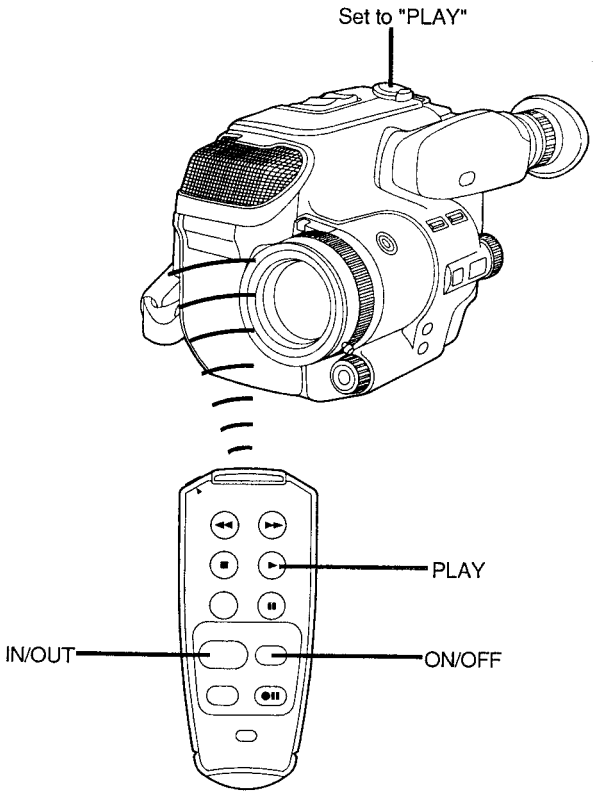
1. Look for the two-digit code of the brand of your VCR in the list.
2. While pressing MBR PRESET, press the button that corresponds to digit (A), and then press the button that corresponds to digit (B).
3. Release PRESET.

[2] **To operate the VCR:**

1. Turn the VCR's power ON.
2. Press the button on the remote control unit corresponding to the function you want to operate while pressing VCR CTL.

- Since the remote control unit has a number of operation codes, determine the appropriate code for operating your VCR by confirming correct VCR operations according to the steps above.

EDITING TECHNIQUES (Cont'd)



	IN	OUT
►1	0:00:25	
2		
3		
4		
5		
6		
7		
8		
COUNTER	0:00:25	
TOTAL	0:00:00	

	IN	OUT
1	0:00:25	0:00:38
►2	0:00:43	
3		
4		
5		
6		
7		
8		
COUNTER	0:00:43	
TOTAL	0:00:13	

RANDOM ASSEMBLE EDITING

The provided remote control offers a feature called Random Assemble Editing (RAE) which lets you pre-select up to 8 scenes to be automatically edited to a VCR. (The VCR must be controllable using the provided remote control, ☞ P.27).

Preparations:

- Connect the VideoMovie and the recording deck as per the diagram on the right (P.29). (Do not connect Ⓐ or Ⓑ yet.)
- VideoMovie: Correctly insert a recorded tape and set the power switch to "PLAY".
- VCR: Turn power on. Insert a recordable tape, and set to the AUX(iliary) mode. Refer to VCR's manual for details.

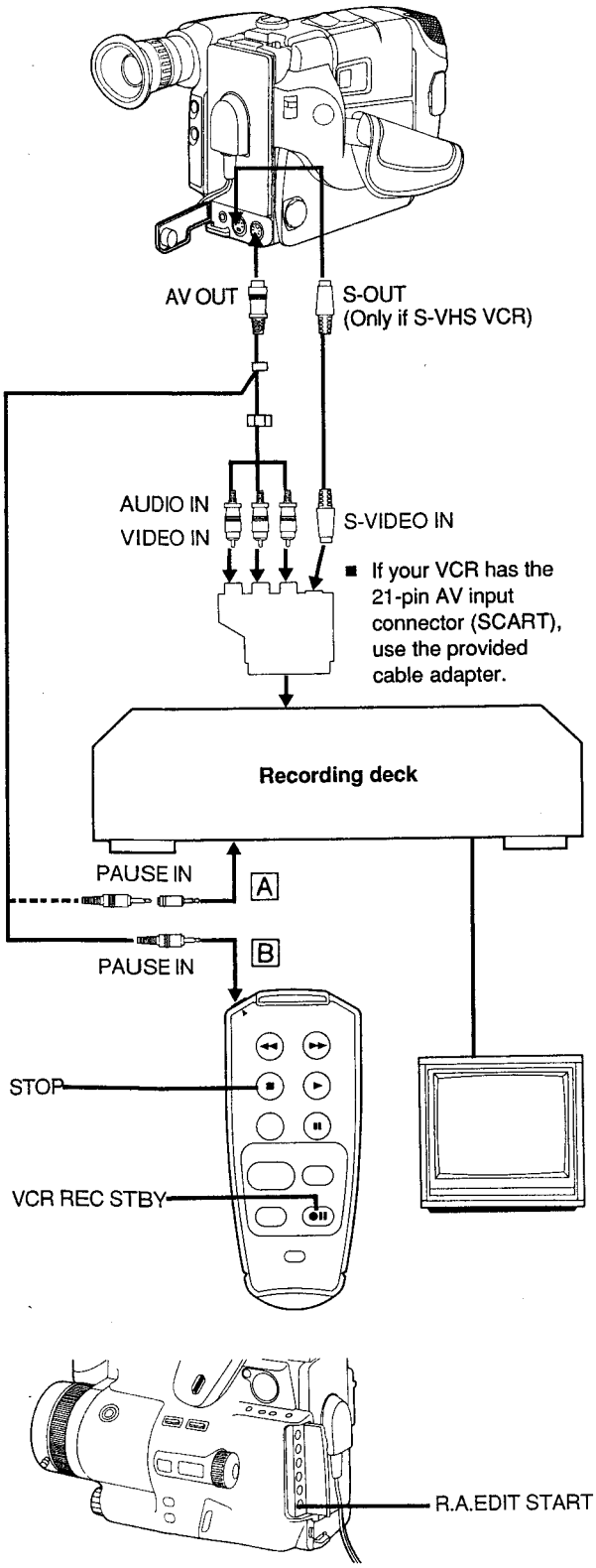
To select up to 8 scenes

1. Point the remote control toward the VideoMovie's infrared beam sensor window and press ON/OFF.
   - The RAE counter display will appear in the viewfinder and on the TV screen.
2. Press PLAY and look for the first scene you want. (Use FF and REW for faster search.)
3. When you find the beginning of a scene you want, press IN/OUT.
   - The in-point's counter reading is registered on the display.
4. When you find the end of the scene you want, press IN/OUT again.
   - The out-point's counter reading is registered on the display.
   - The "TOTAL" reading shows the total running time of the edited scenes.
5. Specify additional scenes by repeating steps 3 – 4.

Notes:

- For any scene, the out-point must have a counter reading that is at least 1 second after the in-point. An out-point with a counter reading less than or the same as the in-point will not be registered.
- Since the VideoMovie prerolls during Random Assemble Editing, there must be at least 15 seconds worth of recording material prior to any in-point on the playback tape.
- Blank portions of tape cannot be registered as in- or out-points.
- If the search time for an in-point exceeds 5 minutes, the recording deck's Record-Pause mode will be cancelled and editing will not take place.
- Pressing the ON/OFF button will clear all in- and out-points from memory.
- When editing, a slight discrepancy between the counter reading and actual in- and out-points may occur. Please position your in- and out-points with enough leeway so that segments will be recorded in their entirety (not cut off).

(Continued on next page.)



To make corrections

During steps 3 and 4 above, pressing CANCEL will erase the last in- or out-point. Pressing again will erase the point before that, and so on.

For automatic editing to a VCR

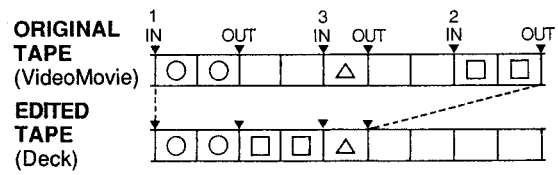
A If the recording deck has a Remote Pause terminal, connect the A/V output cable's PAUSE connector to it using the supplied pin adapter.

B If the recording deck does not have a Remote Pause terminal, connect the cable's PAUSE connector to the remote control's PAUSE IN jack.

1 Point the remote control toward the recording deck's infrared sensor window and press VCR REC STBY.
- Be sure that the VCR enters the Record-Pause mode. If not, use the controls on the VCR to enter the Record-Pause mode.

Note:
With some manufacturer's VCR's, pressing VCR REC STBY may not place the VCR into the Record-Pause mode.

2 Press the VideoMovie's RAE START button.
- The function begins automatic editing; all the scenes are copied to the recording deck in the specified order.
- Keep the remote control pointed toward the VCR's remote sensor window.
- The on-screen display remains superimposed while the VideoMovie searches for each scene (the blinking cursor points to the scene number presently being searched), and is not displayed while the scenes are being edited.
- When RAE is finished, the VideoMovie enters the Still mode and the recording deck enters the Record-Pause mode. Press STOP on both units to end Random Assemble Editing.

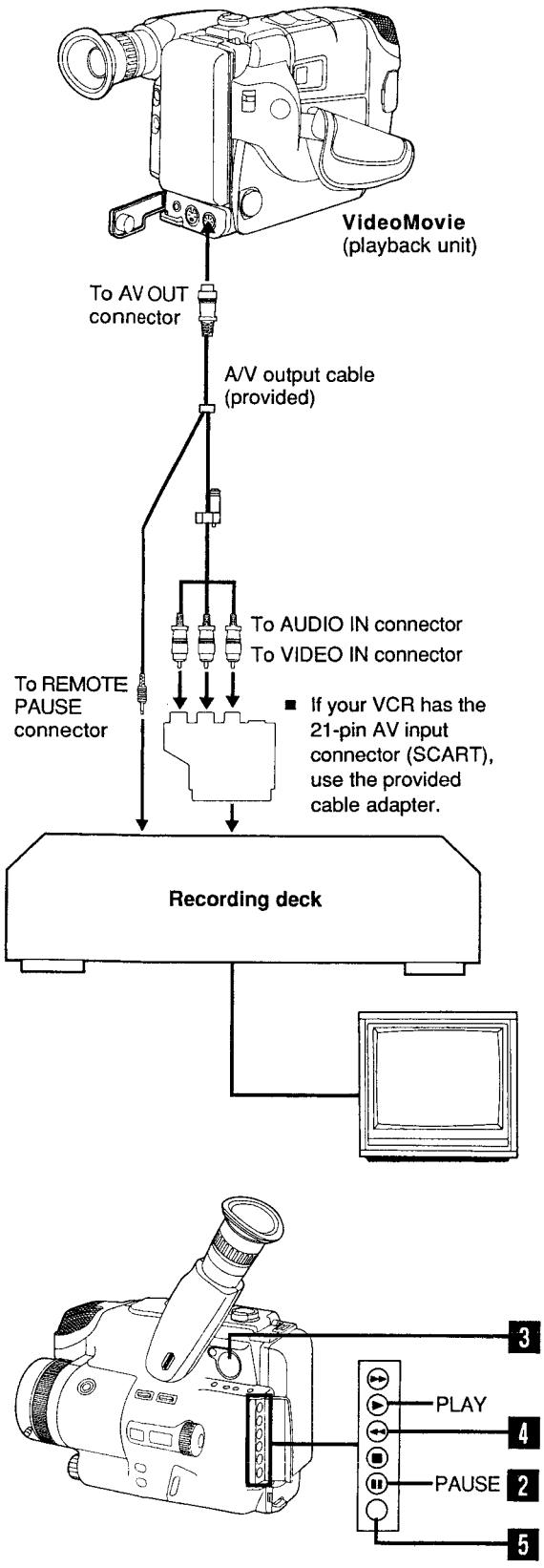


To dub the entire tape without any edits

To make a duplicate copy of the VideoMovie's tape, perform Random Assemble Editing by specifying only one in-point (and no out-point). RAE will automatically dub everything from that in-point to the end of the tape.

Note:
With some VCR models, there may be noise at the in- or out-points on the edited tape.

EDITING TECHNIQUES (Cont'd)



MASTER EDIT CONTROL SYSTEM (Assemble Editing) (When using a JVC VCR equipped with a Remote Pause terminal)

This feature functions only when using a designated JVC VCR equipped with a Remote Pause terminal. The Master Edit Control system enables control of the VCR via the VideoMovie's controls, for quality preroll editing without transition-point gaps and distortion. Please refer to the VCR's instruction manual also.

Preparations:

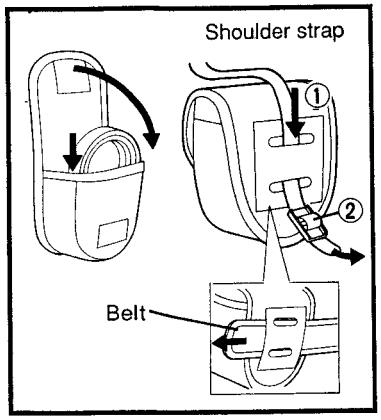
- Make connections according to the diagram on the left.
- Turn on all components' power.
- Correctly insert the appropriate cassettes.
- Set power switch to "PLAY".

1. Engage the recording deck's AUX(iliary) mode and Record-Pause mode.
   — The tape in the deck winds backward for 1.3 seconds.
2. Engage the VideoMovie's Play mode to locate the edit-out point on the tape. When this point is reached, press PAUSE.
3. Set COUNTER RESET and COUNTER MEMORY to "ON" (☞ P.16, 35)
4. Press REW to locate the edit-in point. When it is reached, engage the Still mode.
5. Press EDIT to start editing.
   - The VideoMovie and the recording deck carry out the following procedure automatically.
     1) The VideoMovie prerolls the tape for 5 seconds then starts playback to stabilize the tape run.
     2) After the VideoMovie has played back for 3.7 seconds, it sends a command signal to the recording deck. The deck then starts playback together with the VideoMovie for 1.3 seconds.
     3) When the VideoMovie's tape reaches the edit-in point, the deck starts recording in synchronization with it.
6. When the VideoMovie's tape reaches the edit-out point (counter reading of "0:00:00"), the VideoMovie enters the Still mode and the recording deck enters in the Record-Pause mode automatically.
   - Repeat these steps as required.
   - When the tape reaches the preset edit-out point during the dubbing operation, it may stop slightly before or after the designated point on the tape.
   - With an S-VHS VCR equipped with an S-VIDEO IN terminal, use the provided S-VIDEO cable for connection on the left to obtain higher-quality dubbing result.

Note:
There are some VCRs which are not compatible with the Master Edit Control system.

USING ACCESSORIES

PROVIDED LENS HOLDER

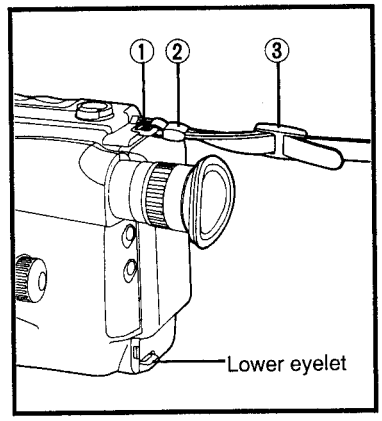


How To Use:
When the front lens is detached for Ultra-Wide Angle shooting, store the lens in the provided lens holder as illustrated.

Attaching To Shoulder Strap:
Do this before attaching the shoulder strap to the VideoMovie. Feed the shoulder strap ① including the buckle ② vertically through the loop on the back of the lens holder, and then attach the shoulder strap to the VideoMovie.

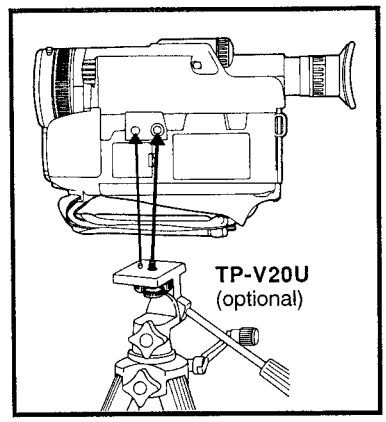
Attaching To A Belt:
The lens holder can also be attached to a belt. Feed the belt horizontally through the loop on the back of the lens holder as illustrated.

SHOULDER STRAP (optional)



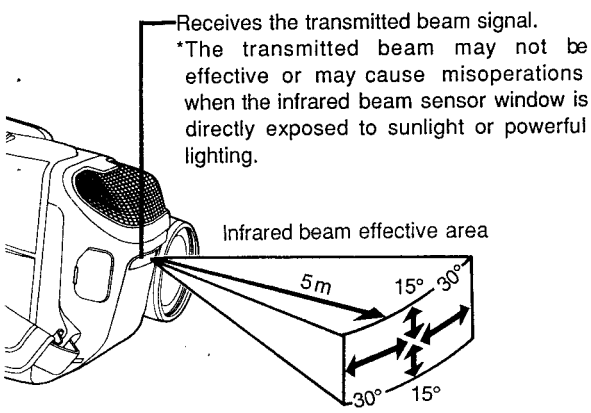
1. Loop the end of the strap over the top of the eyelet ①, then, folding it back, thread the end of the strap first through the keeper ②, then the buckle ③. Making sure that the strap is not twisted, repeat the above procedure to attach the other end of the strap to the other eyelet.
2. Adjust the shoulder strap to the desired length, then slide both keepers up snug against the eyelets to prevent the strap from slipping.

TRIPOD MOUNTING



Align the screw and camera direction stud of the tripod with the camera's tripod mounting socket and stud hole, and firmly tighten the screw.

Infrared beam sensor window

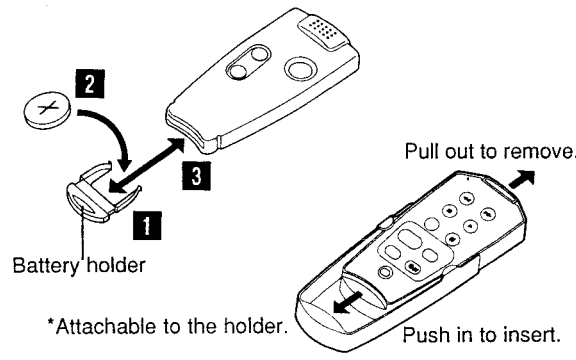

Receives the transmitted beam signal.
*The transmitted beam may not be effective or may cause misoperations when the infrared beam sensor window is directly exposed to sunlight or powerful lighting.
Infrared beam effective area
5m
15°
30°
30°
15°

PROVIDED REMOTE CONTROL UNIT

The remote control unit permits VCR functions to be controlled from a distance.

Inserting the battery

1. Pull out the battery holder.
2. Insert the lithium battery (CR2025), with its plus (+) side up, into the battery holder.
3. Replace the battery holder unit it clicks in place.
   *Read warning on lithium battery. (☞ P. 2)

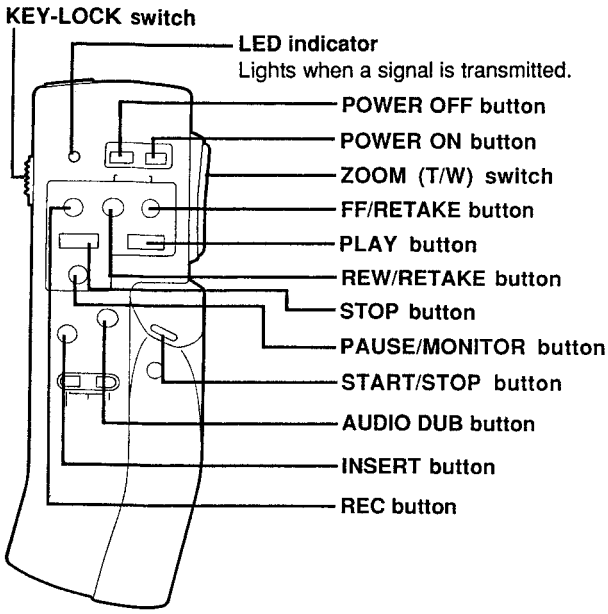


USING THE OPTIONAL REMOTE CONTROL UNIT

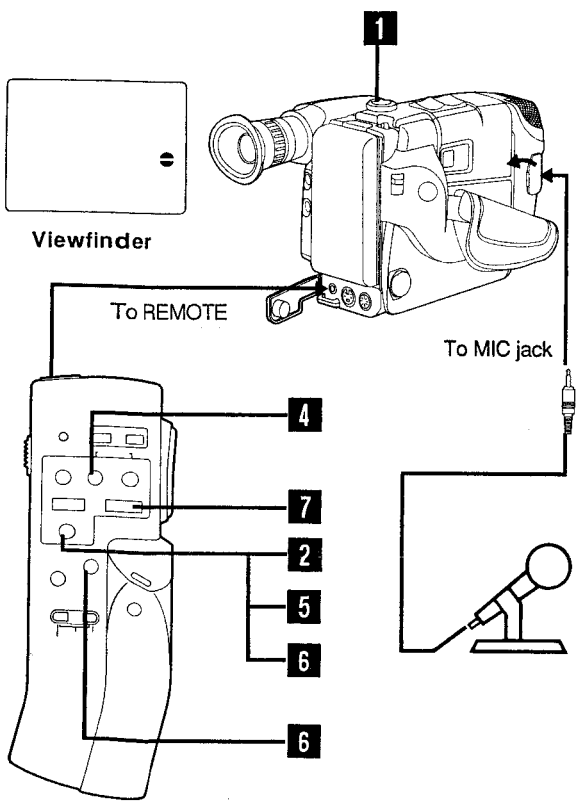
The RM-V20U offers control of the VideoMovie's functions and makes additional editing functions such as Insert Editing and Audio Dubbing possible. When using the RM-V20U, connect the remote cable of RM-V20U to the VideoMovie's REMOTE jack.

*Before use, refer to the instruction booklet.

- Make sure REMOTE is set to ON in the on-screen menu when you wish to use the remote control. (Pre-set to ON when shipped.)
- Functions of the remote control unit's control buttons vary depending on the VideoMovie's power switch position.
- The REC TIME, INTERVAL, and VISS buttons can not be used.



Buttons	Functions	
	With the VideoMovie's power switch set to "LOCK" or "RELEASE".	With the VideoMovie's power switch set to "PLAY".
POWER ON	Power on	
POWER OFF	Power off	
REC	—	—
START/ STOP	Functions same as the Recording Start/Stop button of the VideoMovie.	
REW/ RETAKE	Retake (Rewind)	Rew/Rew Shuttle Search
FF/ RETAKE	Retake (Forward)	FF/FF Shuttle Search
PLAY	—	Playback start
PAUSE/ MONITOR	—	Pause
STOP	—	Stop
INSERT	—	Insert Editing
AUDIO DUB	—	Audio Dubbing



AUDIO DUBBING

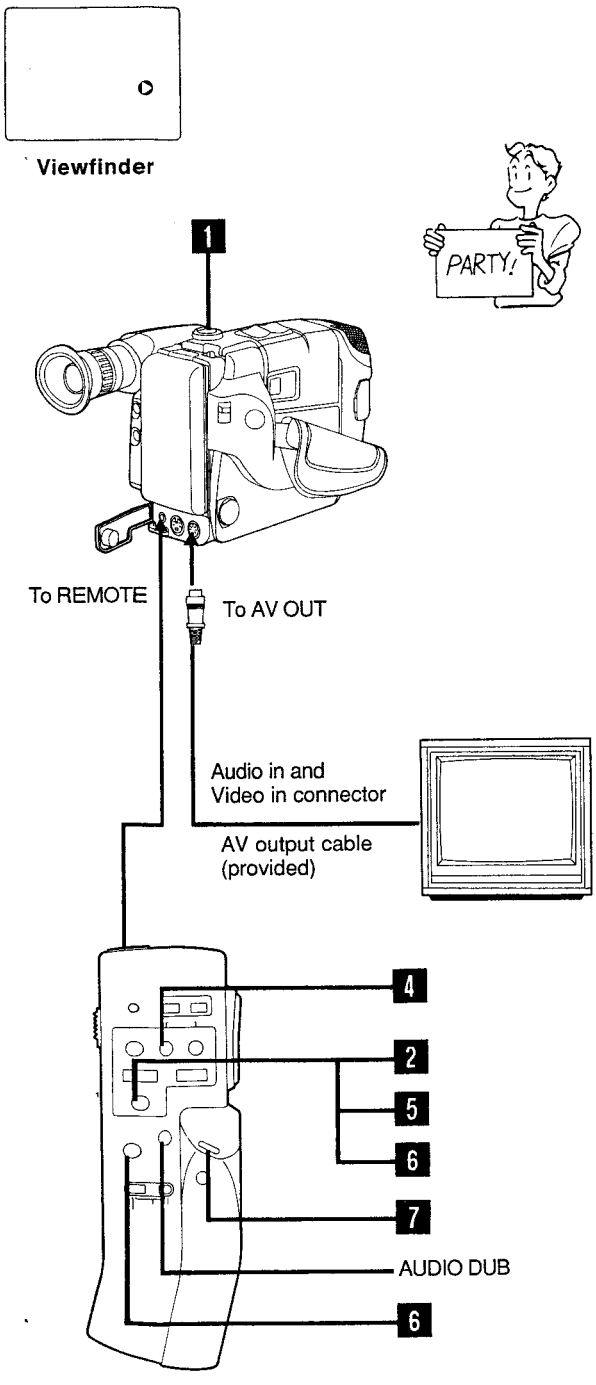
Audio dubbing means recording a new soundtrack on a pre-recorded tape, i.e., replacing the original sound with new audio material. Audio dubbing is applicable only to the longitudinal audio track (normal audio). Audio dubbing on the Hi-Fi audio track cannot be performed.

Precautions

- Tapes with their safety tabs removed cannot be audio dubbed. Reseal the safety tab slot to perform the dubbing.
- If whistling or howling is heard during audio dubbing, reduce the TV volume or move the mike farther away from the TV.
- When dubbing from an external microphone, connect the microphone to the VideoMovie's MIC jack.

1. Set the power switch to "PLAY".
2. Locate the desired edit-out point on the tape and press PAUSE/MONITOR.
3. Set COUNTER RESET and COUNTER MEMORY to "ON" (☞ P. 11, 23).
4. Press REW to locate more quickly the place on the tape you want to begin.
5. Press PAUSE/MONITOR at the exact beginning point.
6. While pressing AUDIO DUB, press PAUSE/ MONITOR to enter the Audio Dub Standby mode.
7. Press PLAY. — Audio dubbing begins.

- When the counter reading of "0:00:00" is reached, audio dubbing stops automatically and the VideoMovie enters the Playback mode.



INSERT EDITING

Insert editing means recording a new scene into a section of prerecorded tape so that a part of the original recording can be replaced with a new sequence without excessive picture distortion at the edit-in and edit-out points. In the Insert Editing mode, the original audio on the normal audio track remains unchanged.

1. Set the power switch to "PLAY".
2. Locate the desired edit-out point on the tape and press PAUSE/MONITOR.
3. Set COUNTER RESET and COUNTER MEMORY to "ON" (☞ P.11, 23)
4. Press REW to rewind the tape a little beyond the beginning of the scene you wish to insert.
5. Press PAUSE/MONITOR exactly at the beginning of the scene to insert.
6. While keeping INSERT pressed, press PAUSE/MONITOR.
   — The VideoMovie enters the Insert Editing mode with the scene at which the VideoMovie is aimed appearing on the screen for monitoring.
7. Press START/STOP to insert the new sequence.

■ When the counter reading of "0:00:00" is reached, insert editing stops automatically and the VideoMovie enters the Playback mode.

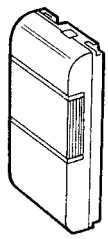
Notes:

- When in the Still mode, the counter indication may be blurred. This is normal.
- When the tape reaches the preset edit-out point during the editing operation, it may stop slightly before or after the designated point on the tape. Also, at that time, noise bars may appear momentarily. Neither of these is a defect of the unit.
- Only video and Hi-Fi audio signals are recorded in the Insert Editing mode. When the normal sound is to be recorded, press the AUDIO DUB and PAUSE buttons simultaneously in the Insert Pause mode. When INSERT and PAUSE buttons are pressed simultaneously again, the unit re-enters the Video-signal-only Recording mode.

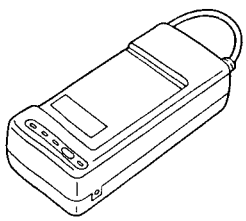
SYSTEMS FLEXIBILITY

For maximum enjoyment, make the most of the provided or optional accessories depending on the situation.

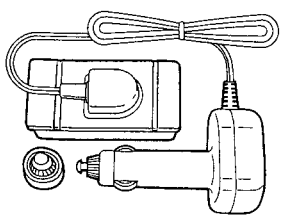
■ **Battery pack**
BN-V12U
BN-V22U
BN-V50U
BN-V60U



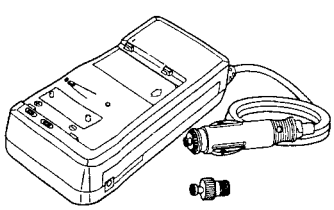
■ **AC power adapter/battery charger AA-V11EG**
Charges battery pack or powers the VideoMovie via household AC current. (Can be used with 110 V to 240 V.)



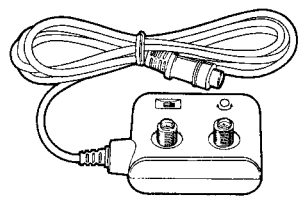
■ **Car battery cord AP-V7E**
Power the VideoMovie via a car battery. (Use with 12 V negative grounded cars only.)



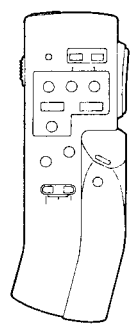
■ **Car battery charger BH-V3E**
Charges battery pack of powers the VideoMovie via a car battery. (Use with 12 V or 24 V nagative grounded cars only.)



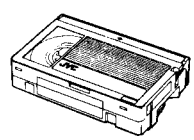
■ **RF unit RF-V4E**
Use to connect the VideoMovie to a regular television for playback.



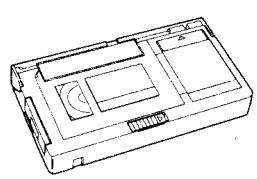
■ **Remote control unit RM-V20U**
Controls VideoMovie's VCR functions from a distance.



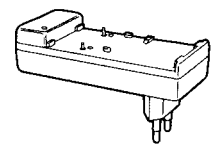
■ **S-VHS-C cassettes SE-C45/C30**
VHS-C cassettes EC-45/30
Allows 45/30 minutes of S-VHS or VHS recording and playback respectively.



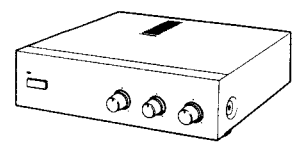
■ **Cassette adapter C-P6U**
Enables the S-VHS-C or VHS-C cassette to be used with regular S-VHS/VHS machines.



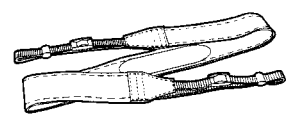
■ **Battery charger BH-VC10EG**
Charges battery pack via household AC current. (Can be used with 110 V to 240 V.)



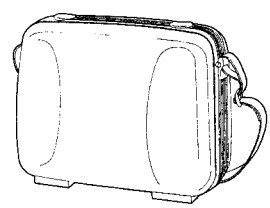
■ **RGB signal converter KM-V7EG**



■ **Shoulder strap VU-V220U**



■ **Carrying case CB-V39U**
Use to carry the VideoMovie together with basic accessories.



*The VideoMovie with a battery pack attached may not be stored.

*The BN-V50U battery pack is not rechargeable with the BH-V3E.

*The VC-V8961E AV/S output cable is not usable with the GR-SZ1EG. Use the provided A/V output cable.

Some accessories are not available in some areas.

SUPPLEMENTAL INFORMATION

What is "colour temperature"?

Light is composed of various colour components in different proportions. A relationship exists between the temperature of a light source and the colour components of the emitted light; as the temperature rises, the colour of the light varies from red, orange, yellow, white to blue in that order. "Colour temperature" is a value that expresses differences in colour among light sources, measured in Kelvin degrees. Bluish light has a higher colour temperature than reddish light.

What is "white balance"?

Making the colours look natural on TV is what white balance is all about. Because a camera is not as adaptable as the human eye, if a light source is reddish, white subjects in that light are recorded as reddish. White balance adjustment is performed to compensate for colour temperature variations of light so that whites are reproduced as white. Correct white balance makes all other colours correct. The VideoMovie can perform automatic white balance adjustment. However, if illumination is insufficient, white balance adjustment cannot be performed. To obtain correct colours, therefore, sufficient illumination is essential.

What is "illuminance"?

"Illuminance" (also called "luminance") is the intensity or brightness of light, expressed in lux. The VideoMovie is designed to provide best pictures under the conditions of a 700-lux illuminance, although shooting is possible all the way down to 1 lux. To obtain good pictures in very bright light, the use of an ND (neutral density) filter is recommended. (See chart on the right.)

How to get good colour pictures.

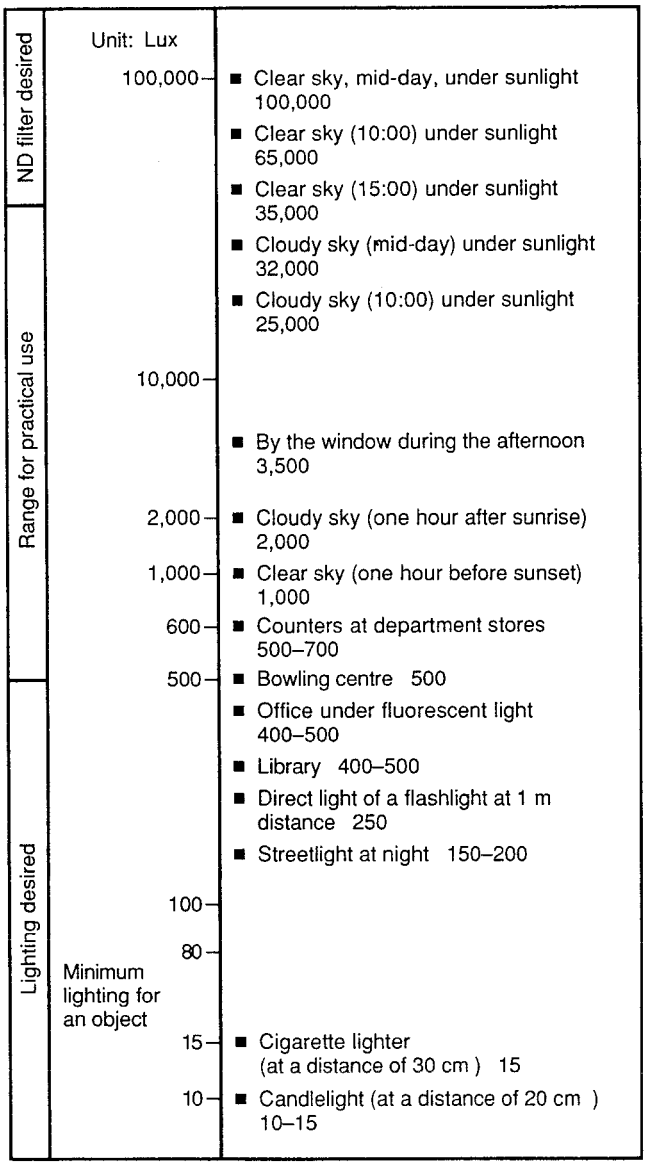
The simplest way is to provide sufficient lighting (close to the camera's reference illuminance) and accurately adjust the camera to the colour temperature of that lighting. If light sources of different colour temperatures are used together, accurate white balance adjustment is very difficult. For example, if natural light is mixed with artificial light, which is likely to occur next to windows, correct colours of the subject are difficult to obtain. It is recommended in such cases that curtains in the room be closed to shut out light from outside. Also, when artificial lighting devices are used, they should all have the same colour temperature. For example, it is recommended that incandescent or halogen lamps not be used together with fluorescent lighting.

Colour temperatures of various artificial lighting

Type of illumination		Colour temperature
Tungsten lamp for home use		2800 K
Tungsten lamp for photographic use		3200 K
Quartz-halogen lamp		
Blue lamp for photographic use		5000 K
Fluorescent lamp	Warm white	3500 K
	Cool white	4500 K
	Daylight type	6500 K

Illuminance chart

- The values on this chart are approximated to give you a rough reference.


ND filter desired
Range for practical use
Lighting desired
Unit: Lux
100,000
10,000
2,000
1,000
600
500
100
80
15
10
Minimum lighting for an object
■ Clear sky, mid-day, under sunlight 100,000
■ Clear sky (10:00) under sunlight 65,000
■ Clear sky (15:00) under sunlight 35,000
■ Cloudy sky (mid-day) under sunlight 32,000
■ Cloudy sky (10:00) under sunlight 25,000
■ By the window during the afternoon 3,500
■ Cloudy sky (one hour after sunrise) 2,000
■ Clear sky (one hour before sunset) 1,000
■ Counters at department stores 500–700
■ Bowling centre 500
■ Office under fluorescent light 400–500
■ Library 400–500
■ Direct light of a flashlight at 1 m distance 250
■ Streetlight at night 150–200
■ Cigarette lighter (at a distance of 30 cm) 15
■ Candlelight (at a distance of 20 cm) 10–15

CAUTIONS

For safety, strictly observe the following instructions.

- Do not open the VideoMovie's chassis.
- Prevent inflammables, water and metallic objects from entering the unit.
- Do not disassemble or modify the unit.
- Do not use the unit when there is lightning in the vicinity. Disconnect the power cable of connected equipment.

Avoid using the unit under the following conditions:

- Places subject to excessive humidity or dust.
- Near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
- Places subject to soot or steam such as near a cooking stove.
- Places subject to excessive shock or vibration.
- Near a television set (rolling pictures or howling might result).
- Extremely hot places.

Do not expose the unit to high temperatures over 40°C for long periods.

If the unit should be subjected to direct sunlight, or left in a closed car in summer, or placed near a heater, the CCD and the auto-focus sensor may deteriorate and the cabinet may become deformed. Furthermore, this also may cause the transistors and other electronic and mechanical parts to malfunction. Remember the following:

- Do not leave the unit in places of over 50°C
- Do not use the unit in places of over 40°C
- Do not use the unit in places of below 0°C
- Protect the unit from excessively dry or humid conditions (below 35% or above 80% humidity).
- For long storage, select a place between –20°C and 30°C

Take special care for protection of the unit.

- Do not allow the unit to become wet.
- Do not leave the unit in closed cars on hot summer days.
- Take special care not to drop the unit or strike it against hard objects. Protect from shocks during transportation.

Make it a rule to observe the following instructions.

- Do not remove the battery pack or disconnect other power supply units during recording or playback before setting the power switch to OFF. If not observed, this will cause tape damage and misoperation.
- When the unit is not in use, remove the battery pack.

Always keep the lens and viewfinder eyepiece clean.

- When the lens is dirty or dusty, blow it with a blower brush and then gently wipe with lens cleaning paper.
- Mold may form if the lens is left dirty.

Be careful not to damage the CCD.

- Do not keep the lens directed at extremely bright objects such as the sun or other light sources for long periods. Although the CCD is less susceptible to such burn than a tube would be, caution should be exercised when using this unit. Most importantly, the lens should be capped except while actually shooting.
- Do not direct the eyepiece of the viewfinder at the sun.

Handle the unit carefully.

- Protect the microphone from excessive shocks.
- Do not carry the unit by holding it only by the viewfinder.

Moisture condensation.

- You have observed that pouring a cold liquid into a glass will cause drops of water to form on the glass's outer surface. This same phenomenon occurs on the head drum of a VideoMovie when it is moved from a cool place to a warm place, after heating a cold room, under extremely humid conditions or in a place directly subjected to the cool air from an air conditioner.
- Moisture on the head drum can cause severe damage to the video tape, and can lead to internal damage to the VideoMovie itself.
- If moisture condensation occurs on the head drum, a condensation warning appears in the viewfinder and the unit enters the Stop mode, unable to function. In such a case, wait for a few hours until the indicator disappears.

Maintenance

- When the VideoMovie's exterior is dusty, clean it by gently wiping with a soft cloth.
- Avoid using of strong cleaning agents such as benzine or alcohol as they may damage the exterior.
- Cleaning should be done only after the battery pack has been removed or other power units have been disconnected.

Serious malfunctioning

If malfunctioning occurs, stop using the unit immediately and consult your local JVC dealer.

General Battery Precautions

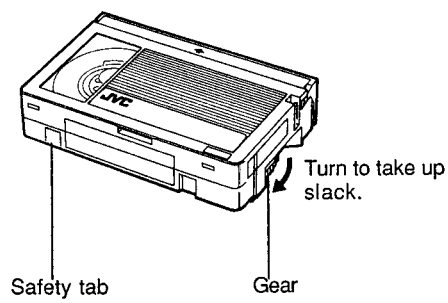
- When the optional RM-V20U/C-P6U is not functioning even when correctly operated, the batteries are exhausted. Repalce them with fresh batteries.
- Use only following batteries in the unit.
  RM-V20U .....R03 (AAA) size
  C-P6U.....R6 (AA) size

Please make note of the followiing rules for battery use. When misused, batteries can leak or explode.

1. Insert the batteries correctly according to the diagram inside the battery section.
2. Do not use old and new batteries together.
3. Do not use two different kinds of batteries Although sizes may be the same, voltages may differ.
4. Do not expose batteries to excessive heat as they can leak, or explode. Do not dispose of batteries in a fire.
5. Remove batteries from the unit if it is to be stored for an extended period to avoid battery leakage which can cause malfunctions.

VIDEO CASSETTES

- The VideoMovie employs only the cassettes carrying the respective S-VHS-C and the VHS-C marks.
- Recording onto prerecorded tapes automatically erases the previously recorded video and audio signals.
- An inverted cassette cannot be inserted.
- Do not load and unload the cassette repeatedly without allowing the tape to run at all. This will slacken the tape and thereby damage it.
- Make certain before loading the cassette that the tape is not slack. If there is any slack, turn the gear on the cassette in the direction of the arrow to take up slack.
- The cassette is equipped with a safety tab to prevent accidental erasure. When the tab is removed, recording is impossible. If you wish to record on a cassette whose tab has been removed, use adhesive tape to reseal the slot.
- To avoid excessive exposure to dust and fingerprints, do not open the front tape cover.



Storage of cassettes

- Avoid exposing the cassettes to direct sunlight. Keep them away from heaters.
- Avoid storing the cassettes in humid or dusty places.
- Do not drop the cassettes. Do not expose them to violent vibrations or shocks.
- Do not expose the cassettes to strong magnetic fields (near a motor, transformer or magnet).
- Place the cassettes in cassette cases and position them vertically.

IN CASE OF DIFFICULTY

What may initially appear to be trouble is not always a real problem. Make sure first...

Symptoms	Check points
Power	
No power is supplied.	■ Is the battery pack correctly installed? ■ Is the battery pack charged? ■ Is the power supply unit correctly connected?
Recording	
Recording is not possible.	■ Check to see if the cassette safety tab is in place. ☞ P 37.
No sound is recorded with an external microphone.	■ Is the microphone's switch set to ON?
Recording does not start.	■ Have you set the power switch to "LOCK" or "RELEASE"?
Scene Selector dial, Snapshot button, and other control buttons do not work.	■ Make sure the power switch is set to "RELEASE".
Playback	
Tape is running, but no playback picture appears.	■ Is the RF unit set to the correct channel? ■ Is the TV receiver set to your video channel? ■ If A/V connection is used, is the TV's VIDEO/TV switch set to VIDEO?
Noise bars appear in the playback picture.	■ Try manual tracking control. ☞ P 22.
Playback picture is blurred or interrupted.	■ Video heads may be dirty or worn out. For head cleaning or replacement, consult the nearest JVC Service Dealer.
Tape transport	
Tape stops during fast forward or rewind.	■ Is the "M" indication visible in the viewfinder? If so, set COUNTER MEMORY to "OFF". ☞ P 23.
Rewinding or fast forwarding is impossible.	■ Check to see if the tape has already been fully wound on one reel or the other.
Other	
Vertical white lines appear when shooting a very bright object.	■ This may occur when the background contrasts very much with the object. This is normal.
Picture is blurred in the Quick Review or Retake mode.	■ Is SP/LP properly set?
Error number (E01, etc.) appears in the viewfinder.	■ Consult your nearest JVC Service dealer.

The VideoMovie is a microcomputer-controlled device. External noise and interference might prevent it from functioning properly. In such cases, first disconnect its power supply unit (battery pack, AC power adapter, etc.) and clock battery; and then reconnect it and proceed as usual from the beginning.

Special note on head cleaning

Accumulation of dirt and other particles on the video heads may cause the playback picture to become blurred or interrupted. Although this VideoMovie is equipped with a built-in head cleaner which automatically cleans the heads, reducing the likelihood of dirty heads, if such troubles are encountered, please consult your nearest JVC dealer.

A built-in head cleaner automatically cleans the video heads and head drum whenever a cassette is loaded and unloaded to reduce head clogging.

SPECIFICATIONS

Format	:	S-VHS/VHS PAL standard
Power source	:	DC 6 V ⎓
Power consumption	:	9.9 W
Signal system	:	PAL-type
Video recording system	:	Luminance: FM recording Color: Converted sub-carrier direct recording Conforms to S-VHS standard
Hi-fi audio recording system	:	Deep-layer recording system conforming to stereo Hi-Fi VHS standard
No. of audio channels	:	2 Hi-Fi audio channels 1 normal audio channel
Cassette	:	S-VHS C / VHS C cassette
Tape speed (SP)	:	23.39 mm/sec
(LP)	:	11.70 mm/sec
Recording time		
Max. (SP)	:	45 minutes (with SE-C45 cassette)
(LP)	:	90 minutes (with SE-C45 cassette)

VIDEO

Output	:	1 Vp-p, 75 ohms, unbalanced (via AV OUT connector)

AUDIO

Output	:	–6 dBs, 1 k-ohm (via AV OUT connector).
Microphone input	:	–68 dBs, high impedance, unbalanced with 1.6 ∅ DC 5 V ⎓ DC out terminal

Hi-Fi AUDIO

Wow and flutter	:	Less than 0.005 % WRMS

CAMERA

Pick up	:	1/3"-format CCD
Minimum required illumination	:	1 lux (Slow shutter Mode)
Illumination range	:	1 to 100,000 lux
Lens	:	**8:1 zoom** , f = 6.4 to 52 mm, **11:1 zoom**, f = 6.8 to 71mm, **Ultra-Wide**, f = 4mm, F/1.8, with auto iris and auto macro, filter diameter 46 mm **Microscope Mode** F/15, distance = 92 ± 2mm
Viewfinder	:	Electronic viewfinder with 0.7" color LCD
White balance	:	Full-auto

GENERAL

Operating temperature	:	0°C to +40°C
Operating humidity	:	35% to 80%
Storage temperature	:	–20°C to +50°C
Weight	:	Approx. 920 g (without lens cap, hand strap, and connector covers)
Dimensions	:	127(W) x 122(H) x 214(D) mm (incl. viewfinder)

AA-V11EG SPECIFICATIONS

Power requirement	:	AC 110 to 240 V∿, 50/60 Hz
Power consumption	:	23 W
Output	:	DC 8.5 V ⎓, 1.3 A (Charge), DC 6.3 V ⎓, 1.8 A (VideoMovie)
Charging system	:	Constant current, peak detection, timer controlled
Dimensions	:	150(W) x 42(H) x 68(D) mm
Weight	:	Approx. 350 g

PROVIDED ACCESSORIES

AC power adapter/battery charger AA-V11EG
Battery pack BN-V22U
A/V output cable
Cable adapter
S-VIDEO cable VC-V44U
S-VHS-C cassette.....SE-C30
Lithium battery.....CR2025
Microscope mode lens extender
Lens holder
Remote control unit

For optional accessories, ☞ P. 34

Note: Up to 11 x optical zoom magnification (measured from 8:1 wide, f=6.4 mm, to 10:1 telephoto, f=71 mm); up to 22 x digital zoom magnification.

Specifications shown are for SP mode unless otherwise specified.
E.&O.E.Design and specifications subject to change without notice.

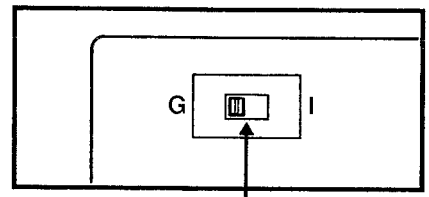
POUR VOTRE SECURITE

ATTENTION:
POUR EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER CET APPAREIL A LA PLUIE NI A L'HUMIDITE

L'adaptateur secteur/chargeur de batterie AA-V11EG ne doit être utilisé que sur 110 – 240 V~, 50/60 Hz.

Attention:
Pour éviter tout risque d'électrocution ou d'incendie, NE PAS utiliser une autre source d'alimentation.

Avertissement sur la pile au lithium
La pile utilisée dans cet appareil peut présenter des risques d'incendie ou de brûlure chimique si elle est mal traitée. Ne pas recharger, démonter, chauffer à plus de 100°C ni mettre au feu. Changer la pile avec une "Panasonic (Matsushita Electric) CR2025, l'utilisation d'une autre pile peut présenter un risque d'incendie ou d'explosion.
- Jeter immédiatement les piles usées.
- Placer hors de la portée des enfants.
- Ne pas démonter ni jeter au feu.



ATTENTION:
Le sélecteur de système sur le côté du convertisseur HF RF-V4E en option a été réglé sur G (PAL continental, 5,5 MHz).

ATTENTION:
Pour éviter tout risque d'électrocution, ne pas ouvrir le boîtier. Aucune pièce intérieure n'est à régler par l'utilisateur. Se référer à un agent qualifié en cas de problème.

REMARQUES:
- La plaque d'identification (numéro de série) et l'étiquette d'avertissement de sécurité se trouvent sous l'appareil ou au dos.
- La plaque d'identification (numéro de série) de l'adaptateur secteur/chargeur est située sous l'appareil.

Cet appareil a été fabriqué pour être conforme aux directives 76/889/CEE, 82/499/CEE, 87/308/CEE, et au standard CEI 65.

Nous vous recommandons de bien lire les précautions à observer aux pages 74 et 75 avant utilisation.

S-VHS C 625 VHS C PAL

Les cassettes portant la marque S-VHS C et VHS C peuvent être utilisées avec cet appareil. Toutefois, les enregistrements S-VHS ne sont possibles qu'avec des cassettes marquées S-VHS C.

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TEKNISET TIEDOT

Järjestelmä		: Standardi S-VHS/VHS PAL
Virtalähde		: 6 V tasavirtaa
Virrankulutus		: 9,9 W
Signaalijärjestelmä		: PAL-tyyppinen
Kuvan nauhoitusjärjestelmä		: Luminanssi: FM-nauhoitus Väri: Muunnettu apukanto, suora nauhoitus, vastaa S-VHS-standardia
Hifi-äänitysjärjestelmä		: Syväkerroksinen äänitysjärjestelmä, joka vastaa stereo hifi-VHS-standardia.
Äänikanavien lukumäärä		: 2 hifi-äänikanavaa 1 tavallinen äänikanava
Kasetti		: S-VHS / VHS kasetti
Nauhanopeus	(SP)	: 23,39 mm/s
	(LP)	: 11,70 mm/s
Nauhoitusaika	(SP)	: Maks. 45 min. (käytettäessä SE-C45 kasettia)
	(LP)	: Maks. 90 min. (käytettäessä SE-C45 kasettia)

VIDEO

Lähtö	: 1 Vp-p, 75 ohmia, epätasapainotettu (AV OUT -liittimen kautta)

AUDIO

Lähtö	: –6 dB, 1 k ohmia (AV OUT -liittimen kautta)
Mikrofonin tulo	: –68 dB, suuri impedanssi, tasapainottamaton, halkaisija 1,6 5 V tasavirta - tasavirran lähtöliitin

Hifi-ÄÄNI

Värinä ja huojunta	: Alle 0.005 % WRMS

KAMERA

Lukupää	: 1/3" CCD
Vähimmäisvalaistus	: 1 luksi (Hitaan sulkimen muoto)
Valaistusala	: 1 – 100.000 luksia
Objektiivi	: **8:1 zoom**, f=6,4 – 52 mm **11:1 zoom**, f=6,8 – 71 mm **Ultralaaja**, f=4 mm, F 1,8, jossa automaattinen aukko ja automaattinen makro suodattimen halkaisija 46 mm **Mikroskooppimuoto** F 15, etäisyys = 92 ± 2 mm
Tähtäin	: Elektroninen tähtäin, jossa 0,7" värillinen nestekidenäyttö
Valkotasapaino	: Täysin automaattinen säätö

YLEISTÄ

Käyttölämpötila	: 0°C – +40°C
Kosteusala	: 35% – 80%
Säilytyslämpötila	: –20°C – +50°C
Paino	: Noin 920 g (ilman objektiivin suojusta, käsihihnaa ja liittimen kansia)
Mitat	: 127 (L) x 122 (K) x 214 (S) mm (tähtäin mukaanluettuna)

AA-V11EG:n tekniset tiedot

Virtalähde	: 110 – 240 V vaihtovirtaa, 50/60 Hz
Virrankulutus	: 23 W
Lähtö	: 8,5 V tasavirtaa, 1,3 A (lataus) 6,3 V tasavirtaa, 1,8 A (videokamera)
Latausjärjestelmä	: Jatkuva virta, huipun tunnistin, ajastinohjaus
Mitat	: 150 (L) x 42 (K) x 68 (S) mm
Paino	: Noin 350 g

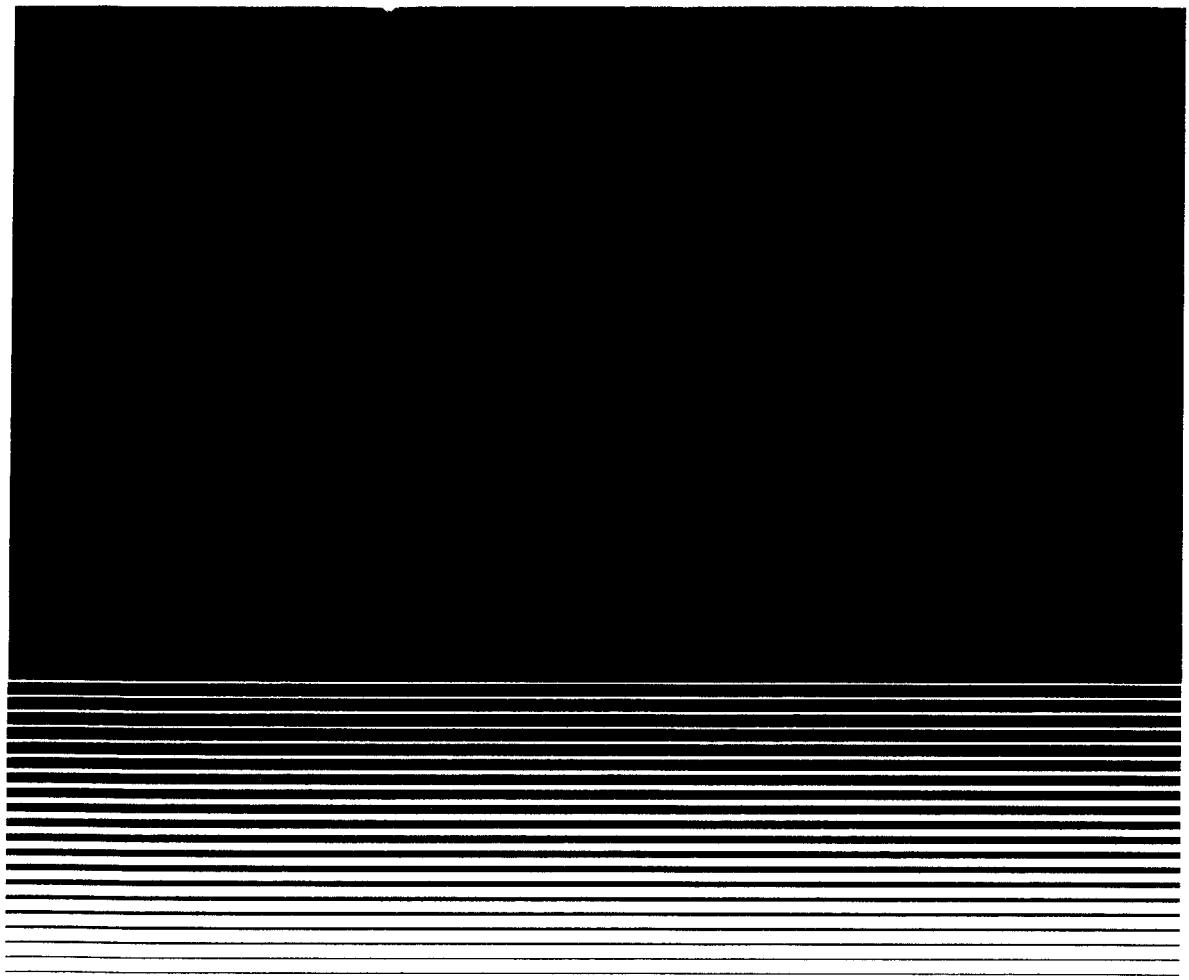
VAKIOVARUSTEET

Vaihtovirtaverkkolaite/akun lataaja AA-V11EG
Akku BN-V22U
A/V-lähtöjohto
Johtosovite
S-VIDEO johto VC-V44U
S-VHS-C kasetti SE-C30
Litiumparisto CR2025
Mikroskooppimuodon linssin jatke
Objektiivin pidin
Kauko-ohjain

Katso tiedot lisävarusteista ☞ s. 338.

HUOM! Jopa 11 x optinen zoomaussuurennos (mitattu 8:1 laajalta, f=6,4 mm 10:1 telekuvalle, f=71 mm); jopa 22 x digitaalinen zoomaussuurennos

Ilmoitetut tekniset ominaisuudet koskevat SP-muotoa ellei toisin mainita.
Ulkoasu ja tekniset ominaisuudet saattavat muuttua ilman ennakkoilmoitusta.



JVC

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